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THESIS

AN AUTOMATED INDIVIDUAL TRAINING RECORD
MANAGEMENT SYSTEM (PROTOTYPE)
UNITED STATES MARINE CORPS

by

Ronald E. Pruiett
David P. Haeusler

March 1984

Thesis Advisor: Norman R. Lyons

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An Automated Individual Training Record Management System (Prototype), United States Marine Corps

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MASTER OF SCIENCE IN INFORMATION SYSTEMS

from the

ABSTRACT

This thesis examines the feasibility of implementing an existing manual system, the Individual Training Record Management System, on a microcomputer. To demonstrate conceptual feasibility, a prototype is designed and implemented utilizing a commercially available database management system (DBMS). The prototype is not intended to be a fully operational system. Rather it provides an opportunity to demonstrate functions that could be fully implemented in similarly designed systems utilizing the basic criteria of simplicity, utility and low cost.

TABLE OF CONTENTS

I. INTRODUCTION 11

A. GENERAL DESCRIPTION 11

B. BACKGROUND 11

C. OBJECTIVES 12

D. ENVIRONMENT 13

E. SYSTEM CHARACTERISTICS 13

1. User friendly 13

2. Reliability 13

3. Cost 14

4. Expandability of data base 14

5. Expandability of functions 14

6. Speed of operation 14

F. SUMMARY 14

1. Scope of Development 14

2. Concept 15

II. SYSTEM DESCRIPTION AND REQUIREMENTS 16

A. INPUT INFORMATION 16

B. SYSTEM SPECIFICATIONS (FUNCTIONAL) 16

1. Training Data 16

2. Data Base Maintenance 17

3. Report Formats 17

4. Data Retrieval 17

5. Standard Reports 18

6. Decision Support Subsystem 20

7. Nonstandard Reports 20

8. System Controls 20

9. Output Mode 21

C. REQUIRED SPECIFICATIONS (NON-FUNCTIONAL) . . . 21

D. DATA STRUCTURE DEFINITIONS (DATA DICTIONARY) 22
1. Introduction 22
2. Data Base Management System 22

III. METHODOLOGY AND DESIGN 24
A. METHODOLOGY 24
1. Software 24
B. SOFTWARE DESIGN 26
1. Structured Programming 26
2. Top-down Design 26
C. DATA FLOW DIAGRAMS 27
D. SYSTEM HIERARCHY 32
E. MODULE DESCRIPTIONS 33
1. ITRMS Master Control Module 33
2. Access Module 35
3. Command Determiner Module 36
4. Nonstandard Report Generator Module . . . 37
5. Standard Report Generator Module 38
6. Maintenance Module 39

IV. IMPLEMENTATION 40
A. CONSTRAINTS 40
1. dBASE II 40
2. Hardware 40
3. Environmental 41
B. GENERAL 42
1. ITRMS Master Control Module 42
2. Access Module 43
3. Command Determiner Module 43
4. Nonstandard Report Generator Module . . . 44
5. Standard Report Generator Module 46
6. Maintenance Module 56

V. CONCLUSION 64
A. GENERAL 64
B. SYSTEM SPECIFICATIONS (FUNCTIONAL) 65
1. Storage Limitations 65
2. Retrieval Limitations 65
C. SYSTEM SPECIFICATIONS (NON-FUNCTIONAL) 65
1. Training 65
2. Error Checking 66
3. Table Mapping 66
D. SUBSEQUENT SYSTEM DEVELOPMENT 66
E. SUMMARY 67

APPENDIX A: DATA ELEMENT DICTIONARY 68
A. FIELD 68
B. NAME 68
C. TYPE 68
D. WIDTH 69
E. DESCRIPTION 69
F. DATA BASE FILES 69
1. Pers (Personnel) 69
2. EST (Essential Subjects Testing) 70
3. QUAL (Qualifications) 70
4. INFOMISC (Information Miscellaneous) . . . 71
5. SECURITY (Access Information) 71
6. COMMENTS (Non-formatted Information) . . . 71

APPENDIX B: DECISION SUPPORT SYSTEM (DSS) DESCRIPTION 73
A. BACKGROUND 73
B. PURPOSE 73
C. FUNCTIONAL DESCRIPTION 73
D. USER'S VIEW 75
1. Summary Information 75
2. Support Depth 76

3. Interdependence 76

4. Restrictions 76

E. BUILDER'S VIEW 76

1. Dialogue 76

2. Modelling 76

F. CONTENTS OF KNOWLEDGE BASE 77

APPENDIX C: ITRS MASTER CONTROL MODULE LISTING 78

A. MASTER ROUTINE 78

B. PAUSE ROUTINE 80

APPENDIX D: ACCESS MODULE LISTING 81

A. ACCESS ROUTINE 81

APPENDIX E: COMMAND DETERMINER MODULE LISTING 83

A. COMMAND DETERMINER ROUTINE 83

B. HELP2 ROUTINE 84

APPENDIX F: NONSTANDARD COMMAND GENERATOR MOUDLE LISTING 86

A. NONSTANDARD REPORT ROUTINE 86

B. NONSTANDARD HELP ROUTINE 99

C. SELECT ATTRIBUTE ROUTINE 100

D. SELECT DESCRIPTOR ROUTINE 104

APPENDIX G: STANDARD COMMAND GENERATOR MODULE LISTINGS 109

A. STANDARD REPORT ROUTINE 109

B. SELECT UNIT ROUTINE 111

C. UNIT ROSTER ROUTINE 113

D. TRAINING STATISTICS ROUTINE 115

E. TRAINING COUNT ROUTINE 126

F. QUALIFICATION COUNT ROUTINE 128

G. TRAINING ROSTER ROUTINE 129

H. TRAINING ROSTER FORMAT ROUTINE 132

I. MARKSMANSHIP STATUS ROUTINE 133

J. CONVERT UNIT ROUTINE 135
K. QUOTA STUDY ROUTINE 136
L. QUOTA SCRATCH PAD ROUTINE 140
M. MARKSMANSHIP ROSTER ROUTINE 155
N. MOS STATUS ROUTINE 157
O. MOS ROSTER ROUTINE 159
P. PERSONNEL DATA ROUTINE 161
Q. PERSONNEL DATA FORMAT ROUTINE 164
R. EST STATUS ROUTINE 165
S. EST COUNT ROUTINE 170
T. EST ROSTER ROUTINE 171
U. EST REPORT FORMAT ROUTINE 174
V. SWIM QUALIFICATION ROUTINE 175
W. SWIM REPORT ROUTINE 178
X. HELP ROUTINE 179

APPENDIX H: MAINTENANCE MODULE LISTING 186
A. MAINTAIN CONTROL ROUTINE 186
B. VIEW CONTROL ROUTINE 188
C. ITR SCREEN FORMAT ROUTINE 190
D. SCREEN DATA RETRIEVALROUTINE 192
E. COMMENT RETRIEVAL ROUTINE 194
F. UPDATE CONTROL ROUTINE 195
G. DATA UPDATE ROUTINE 197
H. ITR CREATION CONTROL ROUTINE 206
I. ITR DATA INITIALIZATION ROUTINE 207
J. DATA ERROR CHECKING ROUTINE 211
K. CALCULATION ROUTINE 214
L. COMMENT UPDATE ROUTINE 219
M. COMMENT CREATION ROUTINE 220
N. DELETE ITR ROUTINE 221
O. SYSTEM FUNCTION CONTROL ROUTINE 223
P. SYSTEM INSTALATION ROUTINE 224
Q. SYSTEM RESET ROUTINE 225

R. SYSTEM ACCESS CONTROL ROUTINE 229

BIBLIOGRAPHY 232

INITIAL DISTRIBUTION LIST 233

LIST OF FIGURES

3.1 Initial Data Flow Diagram 28
3.2 Data Flow Diagram Expansion for DBMS 29
3.3 Data Flow Diagram Expansion 2 30
3.4 Data Flow Expansion for Access Function 31
3.5 Data Flow Expansion for Command Generators . . . 32
3.6 ITRM System Hierarchy 34
4.1 Command Determiner Menu 44
4.2 Attributes and Descriptors Display 45
4.3 Standard Report Menu 47
4.4 Personnel Roster Report 48
4.5 Training Status Report 49
4.6 Marksmanship Status Report 51
4.7 Marksmanship Roster Report 53
4.8 MOS Status Report 53
4.9 MOS Roster Report 54
4.10 EST Status Report 55
4.11 Swimming Qualification Status Report 56
4.12 Maintenance Module Menu 57
4.13 ITR Screen Format 58
4.14 System Function Menu 62
4.15 Access Function Menu 63
B.1 Memory File 77

I. INTRODUCTION

A. GENERAL DESCRIPTION

This interactive prototype automates the existing manual system of maintaining individual training information on USMC personnel. The term "system" is used throughout this thesis to mean hardware and software. The software consists of customized code which overlays a commercially available data base management system (DBMS). The system is targeted for implementation at the infantry or artillery battalion or subordinate unit level. However, with minor modifications, primarily increasing the limitation on the number of subordinate units and increasing the size of the database, the system could be used by any U.S.M.C. organization, including the Marine Air Ground Task Force (MAGTF). No prior user experience in computer or automated systems is assumed. In addition to generating standard reports, the system provides limited decision support capabilities, responds to non-standard data base inquiries, and includes facilities for data base maintenance.

B. BACKGROUND

Individual training subjects in the U.S. Marine Corps encompass a variety of otherwise unrelated training topics that are conducted and evaluated periodically. The common characteristic of individual training vis-a-vis unit training is that training and testing relate to individual skills and individual levels of performance. Since the focus is on individual training and individual testing, data is maintained for each individual in a unit and consequently, the system is very data intensive.

Individual training includes subjects such as "essential subjects", physical fitness, rifle/pistol qualifications, career training, and military occupational specialty (MOS) training. Each subject or grouping of subjects typically includes its own set of training and testing requirements. For example, some individual training subjects require proficiency demonstration only once during an entire career while others must be evaluated annually. In total individual training information includes approximately 60 separate elements of information that must be maintained for each Marine. Individual Training Records (ITR's) are traditionally maintained manually at the company level. A data base consisting of 200 records and 10,000 data elements in a company size unit is not uncommon. In addition to data base maintenance, which includes frequent creation, deletion, and update of records, the data base is often used to provide training management information concerning the current training status of the unit or as a basis for developing future training plans.

It is the contention of this thesis that the system can be operated and maintained by a technically unsophisticated user at a reasonable cost.

C. OBJECTIVES

The objective of this thesis is to design and implement a prototype system that is simple to use and that:

1. Maintains individual training records for a USMC battalion;
2. Provides standard reports upon request;
3. Provides nonstandard reports upon request;
4. Demonstrates a decision support application;
5. Provides a data base maintenance capability.

D. ENVIRONMENT

The system is used and maintained by persons with no prior experience with computers and with little prior training on this system. The system's data base requires frequent maintenance. Approximately a 30% record turnover rate (i.e., 30% of old records will be deleted and 30% new records will be inserted into the data base) is expected each year. Additionally, records will be modified at the rate of approximately 50 data fields per work day for each company (based on an average strength of 150 Marines per company). The physical environment envisioned is a typical office setting with no unique system requirements anticipated.

E. SYSTEM CHARACTERISTICS

The following system characteristics are listed in order of importance.

1. User friendly

The system is simple to operate and maintain. It requires no extended training sessions and it provides prompts to the user.

2. Reliability

The reliability of the hardware and the DBMS is beyond the scope of this thesis. The code written to implement this design is the user-system interface. Accordingly, to ensure the integrity of the system, the DBMS remains transparent and inaccessible to the user. The overall reliability of the system is high. To this end, the system includes the following provisions:

a. Menu driven

b. No possibility of accidental erasure of data base.

c. No possibility of user to "escape" or default to DBMS.

3. Cost

The costs of a microcomputer and the proprietary software required to run the system are low compared to mainframe or mini-computer application.

4. Expandability of data base

The data base can be expanded subject to memory and DBMS constraints. The larger the data base the slower the system will respond to user requirements. This is, however, an acceptable tradeoff.

5. Expandability of functions

The system can be easily expanded to include added functions. This facility has been implemented by incorporating a modular structure in the design. A module can be added or modified with little difficulty.

6. Speed of operation

The speed of the system is relative to the size of the data base. However in all cases compared to the present manual system it is much faster.

F. SUMMARY

1. Scope of Development

This thesis includes the determination of system requirements, system feasibility, system design and review, and implementation of a functional prototype.

2. Concept

The purpose of this thesis is to demonstrate feasibility of the concept: A fully automated individual training record management system for a battalion size unit can be implemented on a microcomputer. The system can be developed and operated at a reasonable cost. Furthermore, the system can be operated and maintained by persons having no prior computer experience after little training.

II. SYSTEM DESCRIPTION AND REQUIREMENTS

A. INPUT INFORMATION

The user's input consists of a sequence of menu prompted responses. Each user's response is either a specific request to the system for data base maintenance, a standard report, or data necessary to generate the desired nonstandard report.

B. SYSTEM SPECIFICATIONS (FUNCTIONAL)

1. Training Data

The system is capable of developing and maintaining training data for at least 800 Marines. The following information is maintained for each individual:

a. Name/SSN/personal data

b. Rank

c. Unit (company and platoon)

d. Annual training requirements status (essential subjects, leadership, SNCO/NCO training ,etc.)

e. Rifle/pistol qualifications status (current year)

f. MOS qualifications

g. An unformatted data field to be utilized as desired by the user. It may be used to maintain the following kinds of information:

(1) Formal schools attended.

(2) Local schools attended.

(3) MCI courses completed.

(4) Participation in training exercises/ training deployments.

2. Data Base Maintenance

Maintenance of the data base is simple and provides positive user control at all times (i.e., user inputs data and views updated individual training record before data is stored into memory).

3. Report Formats

Most standard reports are retrievable in a statistical mode or in a unit roster mode.

a. Statistical Mode

The statistical mode report provides the total or the percent of a unit that has satisfied a particular user specified training criterion (What percent of a unit is swim qualified?).

b. Roster Mode

The roster mode report provides names of persons in a specified unit that have satisfied a training criterion.

4. Data Retrieval

All standard reports are retrievable by unit designator (e.g., battalion, company/platoon). Training data is retrievable by individual, by unit, or by a user defined set of attributes (e.g., all sgts in A CO) utilizing the nonstandard reports option.

5. Standard Reports

The system provides the following standard reports:

a. Unit Roster

The Unit Roster Report will display in alphabetical order the NAME, RANK, and PRIMARY MOS for each member of the selected unit or subunit.

b. Personal Data Report

The Personal Data Report displays for each member of a unit or subunit all personal data including NAME, SSN, RANK, PRIMARY/SECONDARY MOS, UNIT/SUBUNIT NAME, JOIN DATE, EAS, BIRTHDATE, HEIGHT, WEIGHT and a one character boolean comment block.

c. Essential Subject Training Requirements Status Report

The Essential Subject Training Requirements Status Report displays the percent and total number of unit or subunit members that have completed an Essential Subject requirement or the PFT (physical fitness test).

d. Annual Training Requirements Status and Roster Reports

The Training Status Report displays for each essential subject, the percent of the unit that has successfully completed each training element and the total number of unit members that have completed each training element. In addition, the Training Status Report includes completion statistics for PFT1, PFT2, SWIMQUAL, RIFLE QUAL, and PISTOL QUAL.

The Training Roster Report displays in alphabetical order each member of the selected unit or subunit and

his complete training status for the current year. If a training element has been successfully completed for the current year, a letter corresponding to that training element will be shown. An "*" symbol indicates that a training element has not been completed. For example, "FIRST AID AE*H**B**DF" indicates that elements ABDEF and H have been completed and five of the eleven elements have not been completed (i.e., C,G,I,J and K).

e. Rifle/Pistol Qualifications Status and Roster Reports

The Marksmanship Status Report will display the qualification results for the unit or subunit members that have fired the rifle or pistol for qualification during the current year. Also, the percent that have qualified in each category (eg. EX,SS,MM,UN) and current year results for rifle and pistol will be shown. The pistol qualification results include only those members required to fire the pistol for qualification.

The Marksmanship Roster Report will display in alphabetical order the NAME, RANK, DATE OF QUALIFICATION, and QUALIFICATION RESULTS for each member of the selected unit or subunit. Current year results only will be displayed.

f. MOS Qualification Status and Roster Reports

The MOS Roster Report groups the selected unit or subunit by primary MOS and RANK and then displays in alphabetical order the NAME, RANK, PRIMARY MOS AND SECONDARY MOS of all members in the unit or subunit. This report will function regardless of the number or different types of MOS's contained in a unit.

g. Individual Training Record Report

The Individual Training Record Report prompts the user for the name of a member in the data base. After a name is entered the complete individual training record for that individual is displayed. This includes all training data included in the data base on this particular individual (i.e., essential subject status, PFT status, current year rifle/pistol qualification results, swim qualification status) and personal data (i.e., name, rank, SSN, unit, primary MOS).

h. Swim Qualification Report

The Swim Qualification Report displays in alphabetical order for each member of the unit or subunit selected NAME, RANK, UNIT and current SWIM QUAL results.

6. Decision Support Subsystem

The purpose of this component is simply to demonstrate the decision support potential of this system using the available data base.

7. Nonstandard Reports

The system generates user defined non-standard reports. These reports are created from attributes that the user determines. A maximum of three attributes can be selected.

8. System Controls

Safety controls are provided to ensure that the data base cannot be accidentally written over or otherwise destroyed. Also, the system includes an executive access control facility, and control for "read only" access or "read/write" access. System access is permitted in one of the following three levels:

a. Data Base Administrator level is intended for the sole use of the Data Base Administrator and includes full system capabilities (install system, initialize data base, modify access directory, create/ delete/modify data base records).

b. Create/modify data base level

c. Restricted to retrieve information in report format only from the data base.

9. Output Mode

The prototype is capable of sending reports to a CRT screen. With minor modifications the user can be given an option of screen or printed copy output.

C. REQUIRED SPECIFICATIONS (NON-FUNCTIONAL)

The following is a list of non-functional system specifications:

1. The system is interactive.
2. A high school graduate with no computer background can retrieve standard reports with no more than one hour of system training.
3. A high school graduate with no computer background can create and maintain the data base with no more than six hours of training.
4. A high school graduate with no computer background can retrieve a standard report after one hour of training.
5. A high school graduate with no computer background can retrieve a multiple-criteria nonstandard report after an additional one hour of training.
6. The system can be easily modified to change record formats, field formats, and standard report formats

without a major redesign or reprogramming effort. A major redesign is considered any design effort that involves changing a module interface.

7. The system can retrieve standard reports in 15 minutes or less.
8. The system can retrieve non-standard reports in 30 minutes or less.
9. The system does "out of bounds" checking/parameter checking on all quantitative data and standard inputs.
10. The system automatically converts rifle, pistol, and PFT raw scores into corresponding qualifications (e.g. 245 rifle raw score ==> Expert).

D. DATA STRUCTURE DEFINITIONS (DATA DICTIONARY)

1. Introduction

The data dictionary should be maintained by the Data Base Administrator and documentation should be accessible to all users. This data dictionary facilitates maintenance, the integrity of the information in the data base and provides information on data relationships.

2. Data Base Management System

a. Commercial Software

The Data Base Management System (DBMS) kernel is a commercially available software system. The program dBase II, a relational DBMS, provides all of the necessary attributes (availability, record capacity, user friendly environment, etc.). Therefore, dBase II (Ashton-Tate version 2.4) is used, and data structures are implemented by the dBase II system.

b. Data Base Files

The information maintained on each individual is organized in a relational data base. The following records or tuples are defined for each individual (The number of characters per field is defined in the data element dictionary, see Appendix A) :

(1) Personal Information Record. SSN, name, military occupational specialty (MOS), rank, weight, height, company/platoon, birthdate, joindate, expiration of active service (EAS), and gas mask size.

(2) Essential Subject Training Requirements. SSN, 9 essential subjects, and physical fitness information.

(3) Rifle/Pistol/Swimming Qualifications. SSN, rifle score current year, pistol score current year, swimming qualifications, and dates.

(4) Information Miscellaneous. SSN, 11 fields for training information.

(5) Comment. SSN; 250 characters that can be utilized, at the users discretion, for formal/informal school data, deployments information, MCI courses completed or specific comments.

(6) Security. SSN, name, user identification code, password, and authorization level.

III. METHODOLOGY AND DESIGN

A. METHODOLOGY

1. Software

At the center of the software subsystem is the IBM Personal Computer Disk Operating System (DOS 2.0). System requirements for PC DOS operating systems includes:

a. 8088 based microprocessor

b. 128K bytes of RAM memory

c. Cursor addressable 24 line by 80 column CRT

The software layer immediately outside DOS 2.0 is dBase II (version 2.4) which is a commercially available relational data base application system developed and distributed by ASHTON-TATE. dBase II is a data base management tool that permits manipulation of user designed data base files using English-like commands which collectively define a query language.

The layer of code contiguous with and completely surrounding dBase II is what we designed and wrote to satisfy the thesis objective. The code is written in the dBase II query language. This layer of code, that will be referred to as the "outer layer", is designed to be the only interface between the system user and the system. All system entries, data base transactions or manipulations, report inquiries, and system exits are through the outer layer of code. This is an important and necessary design consideration for the following reasons:

a. Simplicity

In order to satisfy the system requirement for simplicity, it was necessary to impose a software layer between the user and the dBase II software. This outer layer presents to the user a series of menus. The user responds to each menu prompt by pressing the keyboard key that corresponds to action desired. The user's response in turn initiates a code sequence that causes the desired action to be taken. If additional user input is required to complete the action, the code causes another menu to be presented to the user. Each menu represents an exhaustive list of possible options that may be selected by the user. This sequence of menu presentation and user response is repeated until the desired action has been adequately defined. At this point the code executes using as variables the input provided by the user. Therefore, this outer layer includes all of the code that determines the functions available to the user and simplifies the operation of the system.

b. Layering

If the user had access to the DOS 2.0 or the dBase II layer he could easily modify the outer layer code. This action could cause a system failure. Therefore, this eventuality must be prevented. Another function of the outer layer is to prevent access to inner layers of software.

c. Data Integrity

Since the data base files contain personal data, that needs to be protected, it is important to limit access to the data base. Also, uncontrolled access to data base files can result in lost data or catastrophic destruction of

the data base. To preclude this, the outer layer provides system security and ensures data integrity.

d. File Maintenance

Whenever data base files are accessed, housekeeping functions need to be performed such as opening or closing files, joining files, creating temporary files or deleting temporary files when no longer needed, and creating or releasing variables. The outer layer automatically performs these functions for the user.

B. SOFTWARE DESIGN

1. Structured Programming

Although the dBase II query language is not a structured programming language, structured programming techniques were employed during the software design. This was done to reduce system maintenance, to simplify system design and to make future changes to the system easier to implement. The following techniques were emphasized during the design phase of the development cycle.

a. Top down design and hierarchical structure

b. Modularization

c. Information hiding

d. In general, efforts were made to maximize module cohesion and to minimize coupling between modules.

2. Top-down Design

The overall design concept was the top-down design or step-wise refinement technique. This concept provides the capability to work from a simple idea and expand it to the final complex product. This process facilitates orderly

and logical development of the design steps. The first step in the process is to determine how the data or an input is transformed to produce the desired output. The concentration is on 'What' is done not 'How' it is done. With this information data flow diagrams are produced. These diagrams should be considered arrows pointing to 'black boxes' which manipulate the data. The actual mechanisms of the manipulations are not important at this point in the design process. The diagrams show the information passing through the system and the transformation of data in the system. These diagrams are produced at an increasing level of detail until further expansion does not provide a significant change.

From the data flow diagrams, hierarchical charts are produced. Any information modifications that are related, are grouped into the same module. Once the hierarchy is established, algorithms are developed using structured programming techniques. These algorithms are then converted into code. The code is implemented using the top down programming technique, this technique implements the highest levels of the hierarchy first. As lower level modules are completed and tested, they are added to the existing modules. This technique simplifies a complicated program.

C. DATA FLOW DIAGRAMS

At first, it is necessary to decide what information goes into the system and what information exits from the system. The user inputs both data and commands from a terminal and receives, from the system, reports and information. The first iteration of the data flow diagram has two inputs and two outputs (see Figure 3.1).

The Individual Training Record Management (ITRM) System is responsible for maintaining a large amount of data. Handling of the information should be transparent to the

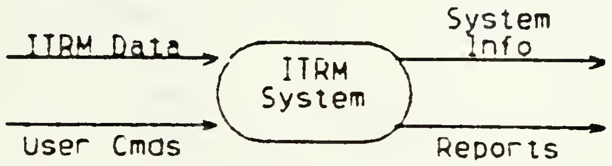


Figure 3.1 Initial Data Flow Diagram

user. Therefore, a Data Base Management System (DBMS) was incorporated to maintain the data base. The DBMS requires specific commands as input and outputs information (see Figure 3.2).

The ITRM System is designed to have a restricted access. The user must enter the proper identification for the system to allow access. The access function produces a valid/invalid acknowledgement to the remaining portion of the ITRM system. Commands and data pass through the Command Determiner which selects the type of action the system is to execute. The three functions called by the Command Determiner are:

1. Standard Command Determiner
2. Nonstandard Command Determiner
3. Maintenance Handler

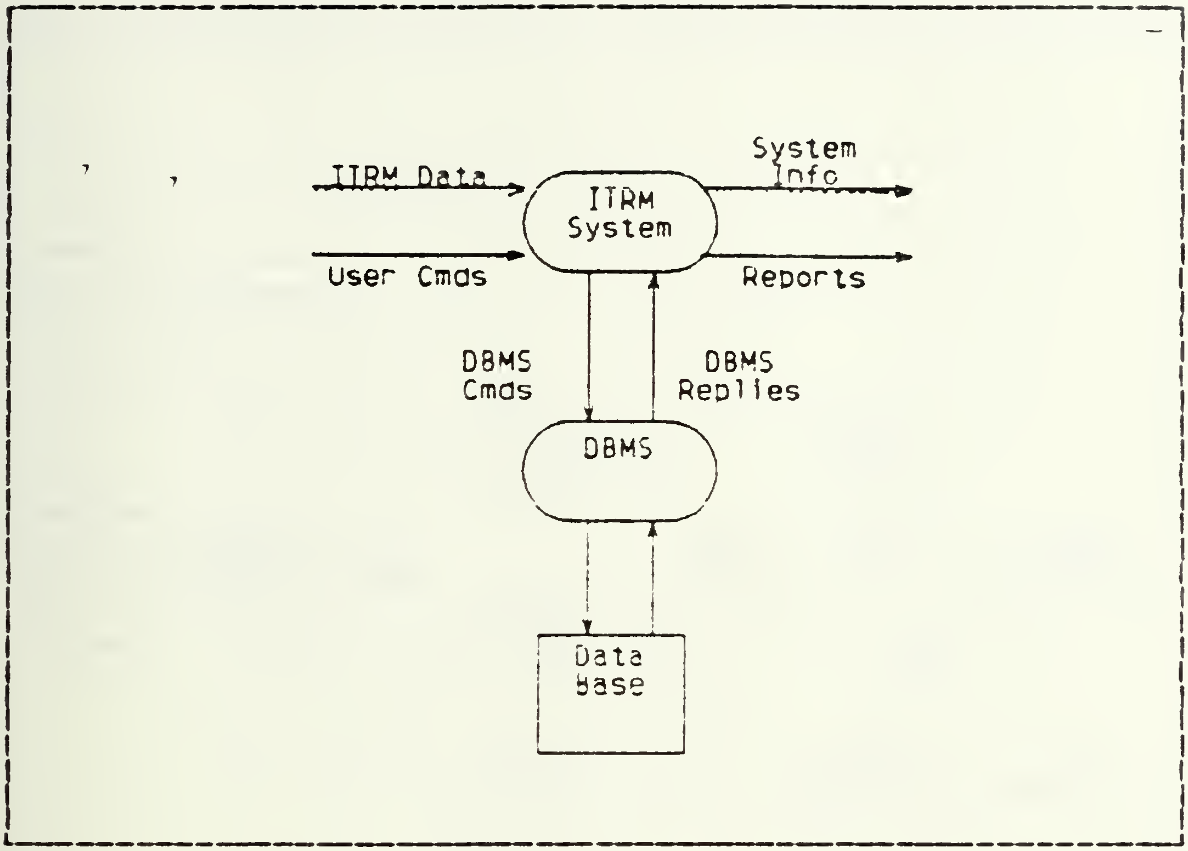


Figure 3.2 Data Flow Diagram Expansion for DBMS

These three functions interface with the DBMS by producing DBMS commands. The DBMS then communicates to the Report Generator the information necessary to produce the desired reports. Figure 3.3 shows the second expansion.

The access control of any system can be very complex. This system requires the user to input an identification code and a password. The system then matches these items to insure an authorized user. If access is valid, the user's authorization level is passed to the rest of the system. If access is invalid, the user gets one more opportunity to enter a correct access sequence. If the user fails again the system terminates the session. The information required to handle the access function is stored in the DBMS. The

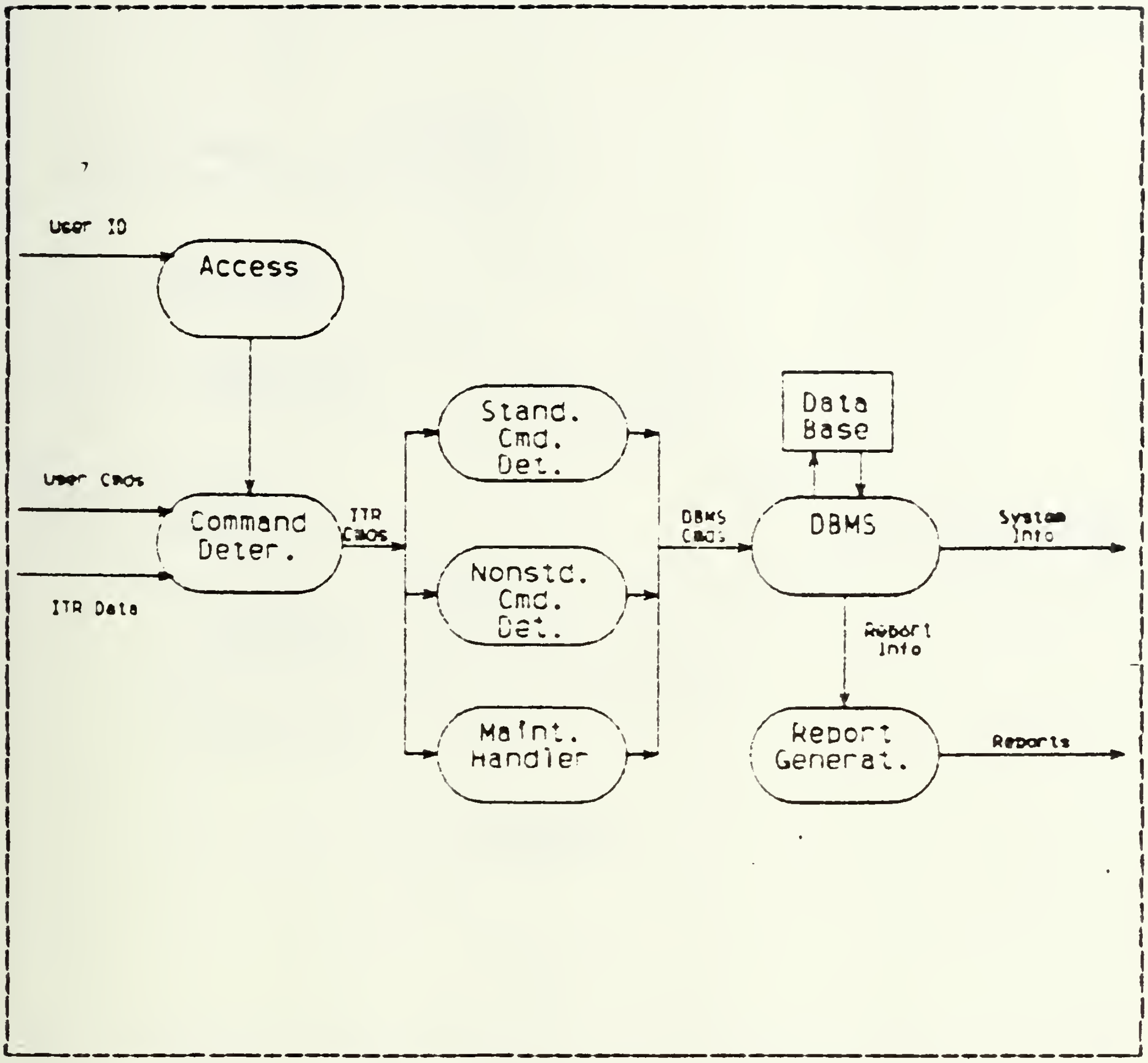


Figure 3.3 Data Flow Diagram Expansion 2

premise of the entire system is to prompt the user into entering the correct response, thereby reducing the need for any prior experience. The ITFM system prompts the user for the proper access codes and informs him when an error has been made. Figure 3.4 displays the Access data flow expansion.

Each of the Command Determiners prompts the user for responses from which DBMS commands are derived. The report

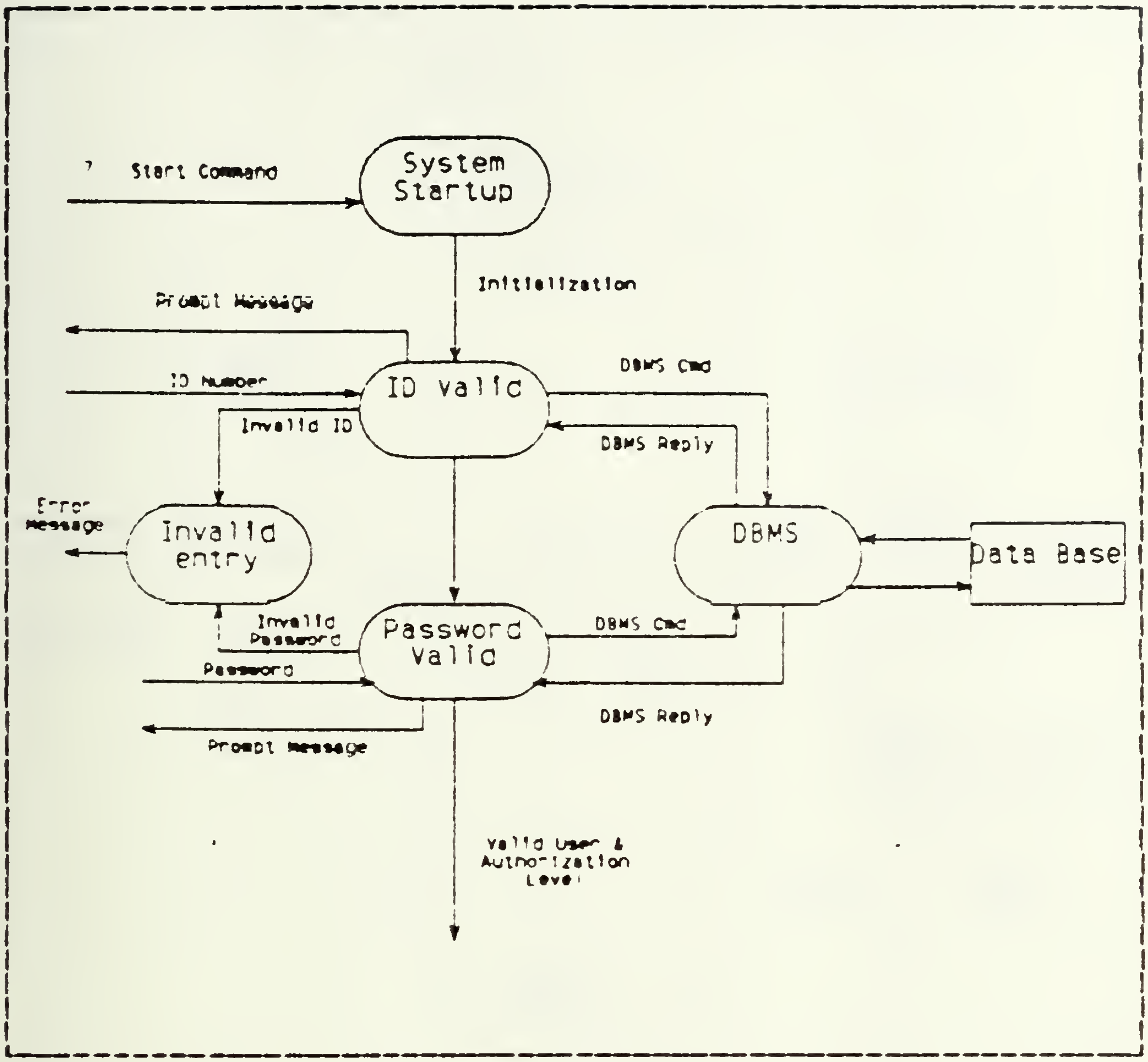


Figure 3.4 Data Flow Expansion for Access Function

generator then interprets the DBMS replies and prompts the user to format the reports (Figure 3.5).

The data flow diagrams, demonstrate the simple and logical flow of the data through the ITRM System. The next step is to logically organize the flow diagrams into a hierarchy of modules that accomplish the data transformations depicted in the data flow diagrams.

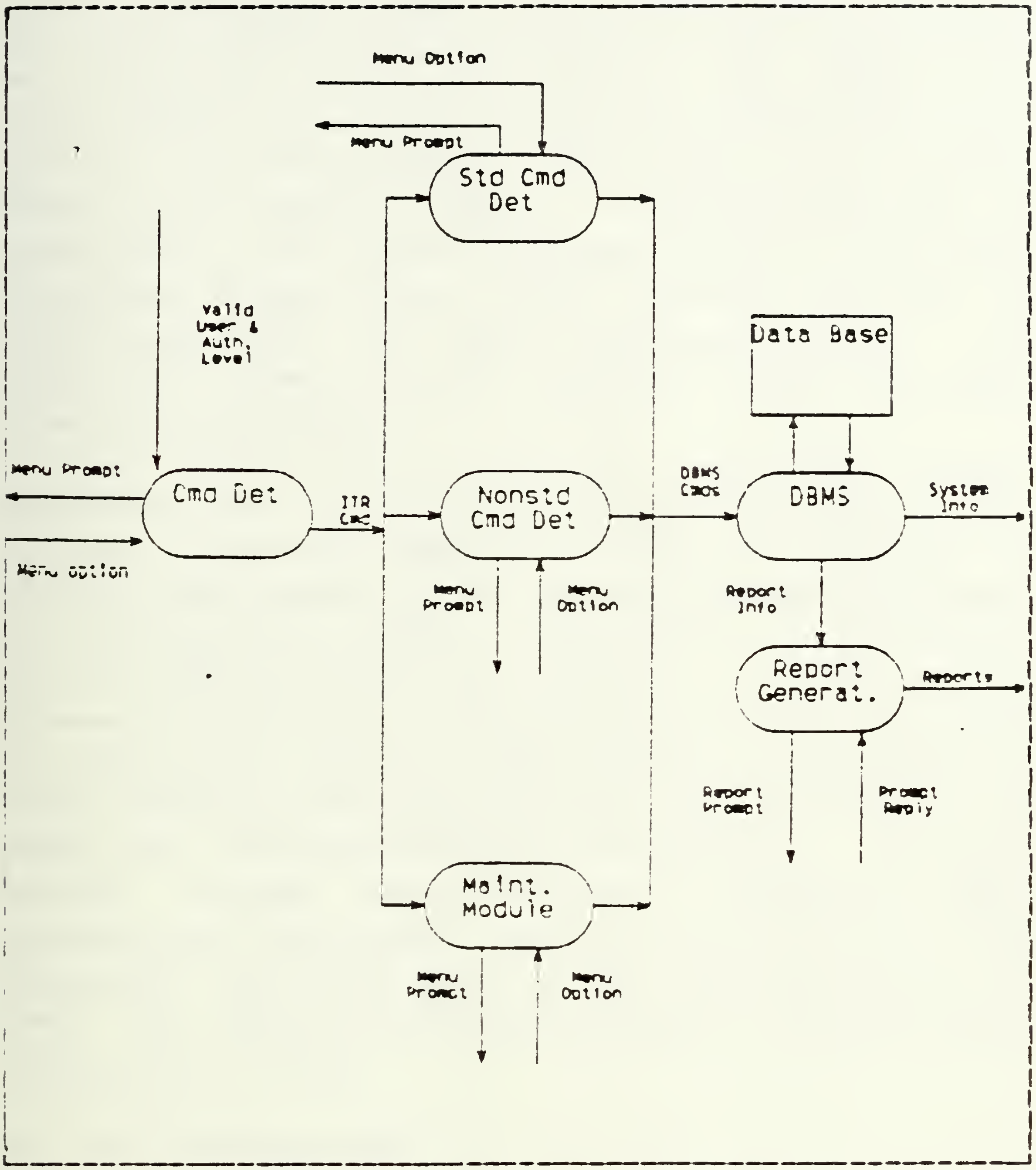


Figure 3.5 Data Flow Expansion for Command Generators

D. SYSTEM HIERARCHY

The ITRM System is relatively simple in design. It requires maintenance of the data base, production of

standard reports, and simple query capabilities for the user through nonstandard reports. The system must be initialized and sequential control established. The ITRMS Master Control Module was created to handle the functions of system control and initialization. This module is the highest level of the hierarchy, level 1. All access functions are consolidated in one module, the Access Module. The Command Determiner Module controls which functions the user can invoke and checks for proper authorization level. The Access and Command Determiner Modules comprise the second level of the hierarchy.

The Standard Command Determiner, Nonstandard Command Determiner, and the Maintenance Handler are combined with portions of the Report Generator to form three modules, the Standard Report Generator, the Nonstandard Report Generator, and the Maintenance Module. These three modules interface with the DBMS and produce DBMS commands. In addition, they process the information returned from the DBMS and produce the appropriate reports. Consolidation of determiner and report generation functions simplifies the structure of the system and facilitates subsequent maintenance. The three modules, Standard Report Generator, Nonstandard Report Generator, and Maintenance, comprise the third level of the hierarchy. The lowest layer of the hierarchy contains the DBMS. The hierarchy displayed in Figure 3.6 demonstrates simplicity of design.

E. MODULE DESCRIPTIONS

1. ITRMS Master Control Module

a. Module Purpose

The ITRMS Master Control Module initializes the system and controls the logical sequencing of all modules.

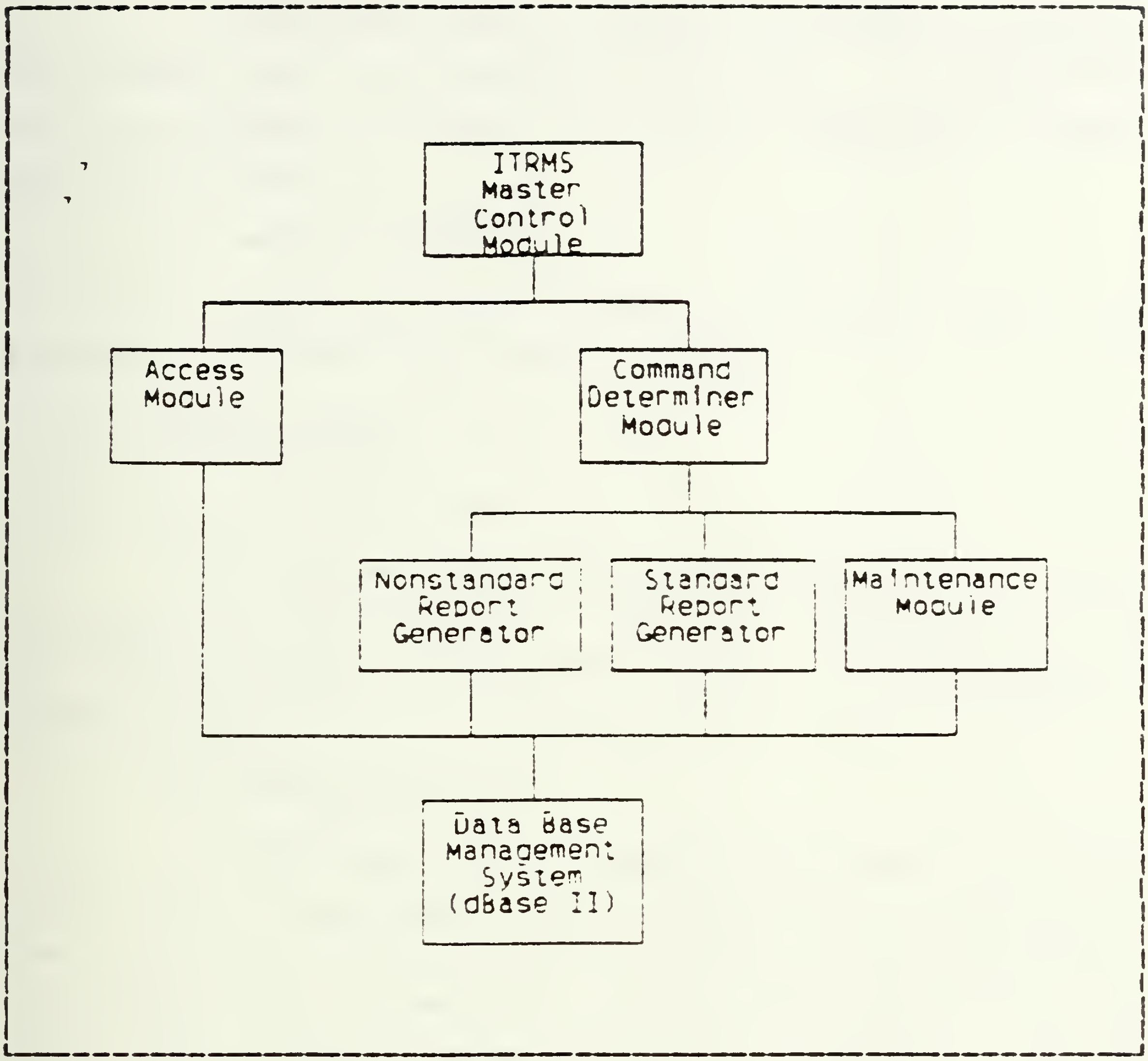

ITRMS Master Control Module
Access Module
Command Determiner Module
Nonstandard Report Generator
Standard Report Generator
Maintenance Module
Data Base Management System (dBase II)

Figure 3.6 ITRM System Hierarchy

b. Module Function

The ITRMS Master Control Module initiates and coordinates all internal system processes (except operating system functions). The module responds to internal cues (from other modules) and to environmental cues (from the user). The module controls the access to all modules and shields the user from the resident operating system. The module will not allow the user to exit to the operating system.

c. Interfaces

The master control module is at level 1 which is the highest level in the module hierarchy. It interfaces with two modules at level 2, Access Module and Command Determiner Module.

d. Design Decisions

This module can be easily modified to handle any expansions by adding new module interfaces.

2. Access Module

a. Module Purpose

The Access Module prompts the user for an identification code and password. The module determines if the user has authorized access and assigns the corresponding level of access.

b. Module Function

The Access Module requests the user's identification code and password. It validates the ID to ensure the user is on the access list and to ensure that the password corresponds with the user ID. If the user ID is not on the access list an appropriate message is returned. If the password does not correspond with the user ID (after two iterations), an appropriate message is displayed and the session is terminated. Once the correspondence of ID and password has been determined, the module passes the access authorization level to the command determiner. The authorization level is used to determine which menu options are available to the specific user.

c. Interface

The Access Module receives control instructions from the ITRMS Master Control Module. The Access Module interfaces directly with the DBMS to manipulate the security file. After the access module completes its processing and if the user is authorized access, the level of access is passed back to the ITRMS Master Control Module.

d. Design Decision

The design allows modifications to be made to the access system without side effects.

3. Command Determiner Module

a. Module Purpose

The Command Determiner Module directs control to either the Standard Report Generator, Nonstandard Report Generator, or the Maintenance Module.

b. Module Function

The Command Determiner asks the user, through a standard set of menu prompts, what task he wishes to accomplish. Based on the user response, the Command Determiner Module transfers control to one of the three lower level modules. The Command Determiner Module also checks to see if the user has access to that module. If access is not authorized then an appropriate message is displayed.

c. Interfaces

The Command Determiner is called by the ITRMS Master Control Module and passes control to either the Standard Report Generator, Nonstandard Report Generator, or the Maintenance Module.

d. Design Decisions

This module allows the separation of the Standard Report Generator, the Nonstandard Report Generator, and the Maintenance Module. This separation facilitates changes and reduces module coupling.

4. Nonstandard Report Generator Module

a. Module Purpose

The Nonstandard Report Generator allows the user to query the data base in a controlled manner. The queries are generated from a series of prompts to the user.

b. Module Function

The module prompts the user, through a series of menus, to produce the desired query. When the module receives the appropriate prompted input from the user, the nonstandard command generator accesses the DBMS for the requested information. The information is then formatted and displayed.

c. Interfaces

The Command Determiner Module calls this module based on user selection. The Nonstandard Report Generator interacts directly with the user. This module constructs the queries and communicates them to the DBMS. It also processes the information received from the DBMS and formats the data into a report.

d. Design Decisions

If there is a future need to modify the types of queries that are available to the user, the changes will be confined to this module.

5. Standard Report Generator Module

a. Module Purpose

The Standard Report Generator produces the DBMS commands that will create the standard reports. These reports are produced on a regular basis, therefore, it is advantageous to standardize the reports.

b. Module Function

The Standard Report Generator displays option menus to the user and translates user's responses into the necessary sequence of DBMS instructions. After the user decides which standard reports will fulfill his needs, the module formats standard reports and displays the user requested information. The Standard Report Generator includes a DSS subset.

c. Interfaces

The Standard Report Generator is called by the Command Determiner. The Standard Report Generator communicates with the DBMS and processes information from the DBMS to produce its reports.

d. Design Decisions

This module was designed to take advantage of the fact that many applications are routine in nature. These are programmed in a single module and significantly simplify access to routine reports. If any of these routine reports need modification, the change can be isolated to this module.

6. Maintenance Module

a. Module Purpose

The Maintenance Module provides users the capability to create, delete, and update the data base records. Necessary system functions reside in this module. The Data Base Administrator maintains the access file from this module and initializes the system to his specific unit.

b. Module Function

To update a record, the Maintenance Module extracts the data in each data base file for a selected unit member. The data is combined into a single screen display representing all data contained in the system on the individual. To update a field, the data in the field can be typed over with current data. Upon completion, each data element is read and returned to its proper location in the appropriate data base file. Creation of new records is accomplished in the same manner. Records are deleted by a single deletion command. Therefore, this command usage is limited to avoid accidental and malicious destruction of data.

c. Interfaces

The Maintenance Module interfaces with the Command Determiner and the DBMS.

d. Design Decisions

All data modifications are implemented using the Maintenance Module. The physical and logical structure of all data base files is hidden from the user.

IV. IMPLEMENTATION

A. CONSTRAINTS

1. dBASE II

Following is a list of dBase II constraints that affected the design of this system and consequently imposed constraints on the implementation of the Individual Training Record Management System:

a. No more than 65535 records can be used in a single data base file.

b. No more than 32 fields can comprise any single record.

c. No more than 254 characters can be placed in any one field.

d. No more than 1000 characters can be placed into any single record.

e. No more than 64 variables can be located in working storage at any given time.

2. Hardware

Following is a list of development hardware constraints that affected the design of this system and consequently impose constraints on the implementation of the Individual Training Record Management System.

a. Main memory storage (RAM) is 512K.

b. Two double density double sided disk drives were used for a total of 720K bytes of disk storage.

c. The IBM PC 8088 microprocessor operates at 4.7 MHz.

To maximize the amount of data that the system maintains, a RAM disk drive is created. This RAM drive allows the program to be copied into memory and enables the full use of the two disk drives for data. Use of the RAM drive increases the speed of the program by allowing the various called routines to be read more quickly into the working storage. The memory access time for the IBM PC is much faster than disk access time. This increase in speed reduces the response time to the user. The objective of the prototype is to handle the data required to maintain a battalion sized unit's training records. The amount of storage required for 800 individuals is approximately two megabytes. This allows for the overhead that the DBMS uses and the room necessary to execute functions that require the creation of temporary files. The available storage in the prototype system limited the test data base to a company sized unit.

3. Environmental

The following environmental considerations constrain the system by placing added requirements on the ultimate design.

a. Inexperienced users

b. Frequent turnover of personnel

c. Limited training time available

d. Hardware maintenance must be readily available from outside commercial sources.

e. Software Maintenance is not intended to be performed at the user level because computer programming skills are not necessarily available.

f. No unusual requirements for physical environment such as smoke or dust free atmosphere, unusual electrical power characteristics or hookup, or vibration dampening, are required.

B. GENERAL

The outer layer consists of six separate modules divided into three levels. This section will briefly describe the routines that make up each module and the system output from each routine. The listings of the programs are in the appendices, and can be examined for further detail.

1. ITRMS Master Control Module

a. Master Routine (Master.prg)

This module controls the sequencing of the program. It is an endless loop which requires the computer to be either turned off or re-booted to exit the ITRM System. The Master routine requires the user to switch diskettes. The user receives a message to physically exchange the program diskettes with the data diskettes. If the diskette exchange is not made or is made improperly the user is prompted again to make the proper exchange.

The Access Module is initiated by the Master Routine and if a valid indication is returned, the Master Routine will initiate the Command Determiner Module. Once the Command Determiner Module is exited, the Master Routine loops to the beginning to receive a user command to initiate the Access Module.

b. Pause Routine (Pause.prg)

This routine provides a time delay for the system. When this routine is called, it delays the functioning of the system for approximately thirty seconds.

This routine is used to delay error messages that are displayed for a short period of time.

2. Access Module

a. Access Routine

The Access Routine prompts the user for an identification code. The routine then instructs the DBMS to search for that code in the security data base file. If the code is not found a message is displayed and the user can try again. If the code is found the corresponding password from the data base is stored in memory. The user is then prompted for the password. When it is entered, if it does not match the password in memory an error message is displayed and the user can try again. If the password that the user enters matches the password in memory, a valid user state is passed to the Master Routine with a user authorization level.

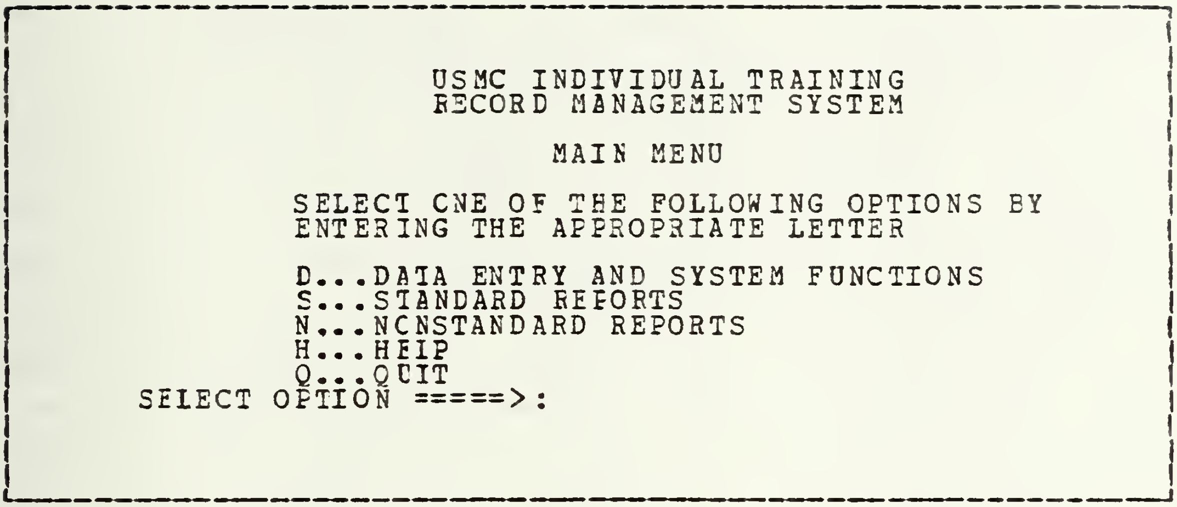
3. Command Determiner Module

a. Command Determiner Routine (Cmddet.prg)

The Command Determiner Routine displays to the user a menu. The user can choose to initiate the Nonstandard Report Generator, Standard Report Generator, Data Entry and System Functions (Maintenance), Help, or Quit. The user enters the appropriate letter which is processed by a case statement that initiates the selected module. Figure 4.1 displays the Command Determiner Menu.

b. Help2 Routine (Help2.prg)

The Help2 Routine provides information to the user on the functions that can be initiated from the Command Determiner and the Maintenance Module. The information is presented to the user to help in the selection of the



```
                    USMC INDIVIDUAL TRAINING
                    RECORD MANAGEMENT SYSTEM

                           MAIN MENU

              SELECT ONE OF THE FOLLOWING OPTIONS BY
              ENTERING THE APPROPRIATE LETTER

              D...DATA ENTRY AND SYSTEM FUNCTIONS
              S...STANDARD REPORTS
              N...NONSTANDARD REPORTS
              H...HELP
              Q...QUIT
        SELECT OPTION =====>:
```

Figure 4.1 Command Determiner Menu

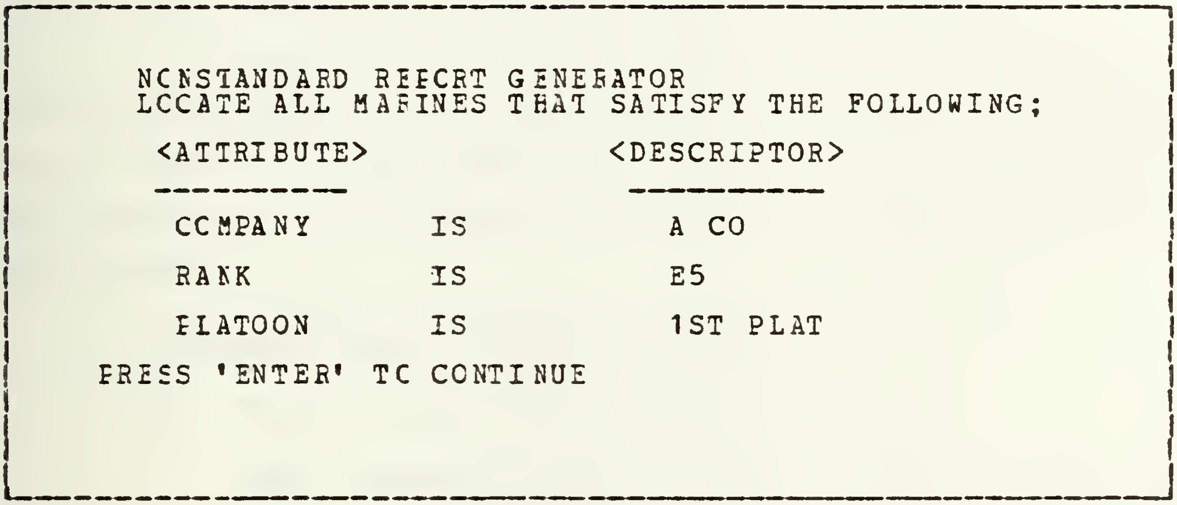
appropriate module and is not designed to explain the functioning of the entire system. The systems built-in prompts walk the user through the necessary steps to accomplish the desired task.

4. Nonstandard Report Generator Module

a. Nonstandard Report Routine (Nostdrpt.prg)

This module gives the user an option to go directly to the report or to view a help module. If the user desires to go directly to the report, this routine queries the user for the first set of attributes and attribute descriptions. After the user's selections are obtained, the routine searches the appropriate data base files to locate all records that satisfy the user specified attribute and attribute description. Attributes are field names such as RANK, COMPANY, RFLQUAL, etc. Up to three attributes from any data base files (the data base file location is invisible to the user) may be specified by the user. Multiple attributes are automatically joined by the routine using a logical "and" operation. The routine

employs a series of case statements. For each attribute selected, the attribute name is stored. Slctdesc.prg is called which stores an attribute description such as E5 (for RANK) or A CO (for COMPANY) or EX (for RFLQUAL). After the user has finished selecting attributes and attribute descriptions, the routine identifies the correct database files and either creates a temporary file containing the needed information or ,if only two database files are involved, primary and secondary files are identified. The report is then displayed. Figure 4.2 depicts the sequence of screen displays for attributes and descriptions of "COMPANY is A CO" .AND. "RANK is E5" .AND. "PLATOON is 1ST PLAT".



```
      NONSTANDARD REPORT GENERATOR
      LOCATE ALL MARINES THAT SATISFY THE FOLLOWING;
       <ATTRIBUTE>             <DESCRIPTOR>
       -----------             -----------
        COMPANY        IS         A CO
        RANK           IS         E5
        PLATOON        IS         1ST PLAT
    PRESS 'ENTER' TO CONTINUE
```

Figure 4.2 Attributes and Descriptors Display

b. Nonstandard Help Routine (Nostdhlp.prg)

This routine responds to the user's request for "HELP" while in the Nonstandard Report Menu. It displays a brief explanation of the attribute and attribute description process.

c. Select Attribute Routine (Slctarti.prg)

This routine prompts the user to select attributes. After the first and second selection the user is asked if he wants to select another attribute (only three attributes are permitted, therefore after the third attribute and attribute description set have been selected the routine automatically executes the user request). If the response is yes, the selection procedure is repeated. This process is continued until the user answers no or three attributes have been selected. The routine locates the appropriate data base files and displays the NAME, SSN, and attribute information for each record that satisfies the user's specified criteria.

d. Select Descriptor Routine (Slctdesc.prg)

This routine prompts the user to select attribute descriptions. Each attribute description is stored into a memory variable for later use when the database files are searched. An attribute description is selected for each attribute.

5. Standard Report Generator Module

a. Standard Report Routine (Stdrpt.prg)

This routine generates the primary menu for standard report selection and stores the user's response in a memory variable. Control is then passed to the appropriate subroutine to obtain the necessary data from the database. This routine will continue until the user responds with a "Q" (QUIT). Figure 4.3 displays the Standard Report Menu.

```
                    STANDARD REPORT SELECTION
       SELECT REPORT BY ENTERING THE APPROPRIATE LETTER

       A...UNIT ROSTER
       B...TRAINING STATUS REPORT
       C...TRAINING ROSTER REPORT
       D...INDIVIDUAL TRAINING RECORD
       E...MARKSMANSHIP STATUS REPORT
       F...MARKSMANSHIP ROSTER REPORT
       G...MOS STATUS REPORT
       H...MOS ROSTER REPORT
       I...PERSONAL DATA REPORT
       J...EST STATUS REPORT
       K...EST ROSTER REPORT
       L...SWIM QUALIFICATION REPORT
       M...HELP

       Q...QUIT

  SELECT OPTION ====>:
```

Figure 4.3 Standard Report Menu

b. Select Unit Routine (Slctunit.prg)

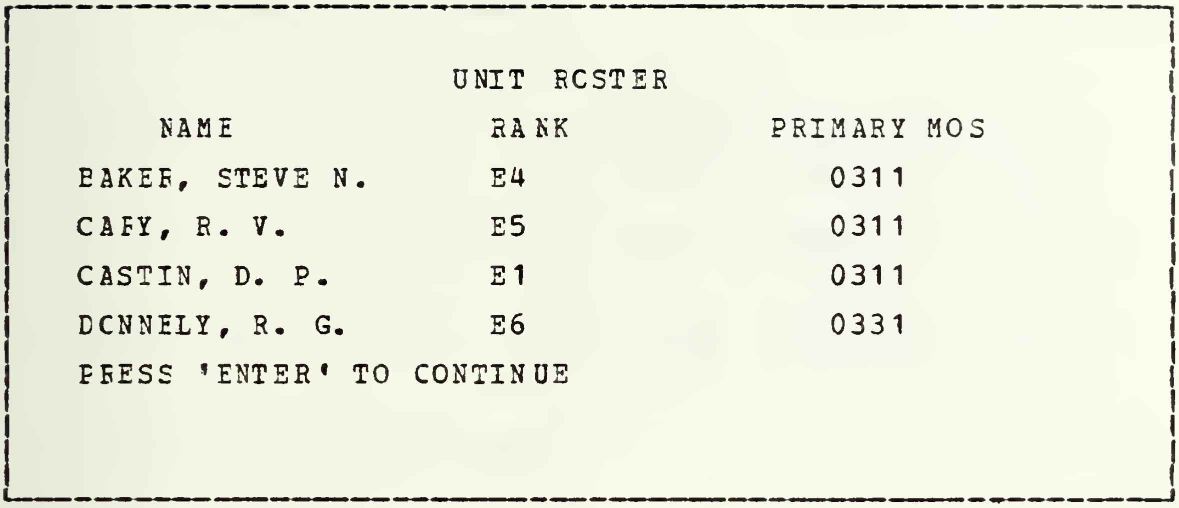
This routine prompts the user to select the size and name of the unit (i.e., battalion, company, platoon) for the report generation. The user responds with a letter that corresponds to a user installed company or platoon designation.

c. Unit Roster Routine (Unitrost.prg)

This is a control routine which creates the personnel roster for the unit specified by the user's response to the Slctunit Menu. Figure 4.4 displays a copy of the Personnel Roster Report.

d. Training Status Routine (Trngstat.prg)

For the selected unit, this routine calculates the total number of training elements completed for each training category. For example, the training category



```
                    UNIT ROSTER
     NAME                RANK            PRIMARY MOS
  BAKER, STEVE N.        E4                 0311
  CARY, R. V.            E5                 0311
  CASTIN, D. P.          E1                 0311
  DONNELY, R. G.         E6                 0331
  PRESS 'ENTER' TO CONTINUE
```

Figure 4.4 Personnel Roster Report

"HISTORY" consists of three training elements (A, B, C). A percent completed figure is calculated for each training element by dividing the total training elements completed (EX. ZZAHIS, ZZBHIS, ZZCHIS) by the total number of personnel in the unit (ZZTOTAL). Both the totals for each element and the percent completed figures are shown (see Figure 4.5).

e. Training Count Routine (Cntest.prg)

This routine counts the number of essential subject training elements that have been completed in the unit or subunit specified.

f. Qualification Count Routine (Cntqual.prg)

This routine saves all memory variables in a memory file (ZZTOTAL) and then counts the number of persons that have not completed SWIMQUAL, RFLQUAL, PSTQUAL and persons in the unit not required to qualify (NA).

```
                  TRAINING STATUS REPORT
 CODE OF CONDUCT...     42 PERCENT COMPLETED A...75
                        80 PERCENT COMPLETED B...144
                        48 PERCENT COMPLETED C...86

MARINE CORPS HISTORY...73 PERCENT COMPLETED A...131
                        82 PERCENT COMPLETED B...147
                        66 PERCENT COMPLETED C...119

CLOSE ORDER DRILL...    46 PERCENT COMPLETED A...83
                        64 PERCENT COMPLETED B...115
                        79 PERCENT COMPLETED C...142

  PRESS 'ENTER' TO CONTINUE
```

Figure 4.5 Training Status Report

g. Training Roster Routine (Trngrost.prg)

This routine provides the Training Roster Report. It starts at the top of the Pers.dbf and looks at each record individually. If a record corresponds to the unit selected by the user, the routine Trngrpt.prg is called which collects and displays the training data that corresponds to the current Pers.dbf record (e.g., If the user wants training data on every member of 1ST PLAT, A CO, Trngrost.prg locates each record in the Pers.dbf which belongs to 1ST PLAT, A CO. Trngrpt.prg then displays the training data from the appropriate data base files.). Information on one individual is displayed in six rows. Four sets of data are displayed per screen. The user presses the "enter" key to scroll forward to each succeeding screen display.

h. Training Roster Format Routine (Trngrpt.prg)

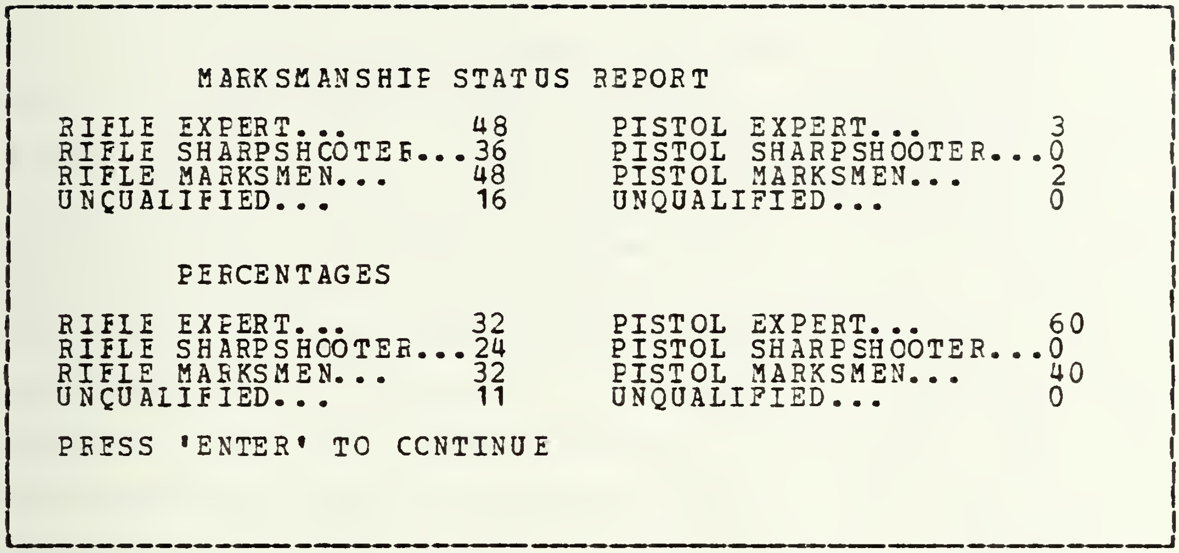
This defines a coded report format which displays COC, HIS, MKS, COD, INT, TAC, NBC, PFT1CLSS, PFT2CLSS, UNI and AID for each member of the unit or subunit selected.

i. Marksmanship Status Routine (Mksstat.prg)

This routine creates a temporary file which contains the current year rifle and pistol qualification results for each member in the selected unit or subunit. The results are summed by qualification category for the rifle and pistol. Percentages are calculated and displayed in a summary status report which is automatically displayed on the screen. From this module a simple decision support submodule may be called at the discretion of the user. If the user desires to analyze his remaining rifle range quotas and compare them with his total number of range requirements for the current year, he may elect to "Analyze Rifle Range Quotas" (See Quota Study Routine for a more complete description.). Figure 4.6 displays the Marksmanship Status Report.

j. Convert Unit Routine (Cvrtunit.prg)

This routine stores the name of the company and platoon selected (unit and subunit) by the user during routine 'Slctunit'. This is necessary because when the user selects a unit and subunit, it is done by menu selection. Accordingly the only thing stored into memory is the corresponding letter from the menu provided by Slctunit.prg (A, B, C, D, E). Some screen displays require the unit name (e.g., "A CO" vice "A") so a conversion is necessary.



```
        MARKSMANSHIP STATUS REPORT

RIFLE EXPERT...        48      PISTOL EXPERT...       3
RIFLE SHARPSHOOTER...36        PISTOL SHARPSHOOTER...0
RIFLE MARKSMEN...      48      PISTOL MARKSMEN...     2
UNQUALIFIED...         16      UNQUALIFIED...         0

       PERCENTAGES

RIFLE EXPERT...        32      PISTOL EXPERT...       60
RIFLE SHARPSHOOTER...24        PISTOL SHARPSHOOTER...0
RIFLE MARKSMEN...      32      PISTOL MARKSMEN...     40
UNQUALIFIED...         11      UNQUALIFIED...         0

PRESS 'ENTER' TO CONTINUE
```

Figure 4.6 Marksmanship Status Report

k. Quota Study Routine (Qtastudy.prg)

The Qtastudy.prg and the Quotapad.prg make up the decision support submodule. This module is used by Mksstat.prg and displays the range quotas that remain for the current year. The current month is extracted from the log on date. The range quotas for each unit are stored in a memory file during the annual initialization procedure. The appropriate set of range quotas for the unit involved is retrieved and stored into memory variables. Summary information is provided concerning the relationship between remaining range quota requirements and remaining range quota allocations. Upon conclusions of the module the user may return to the Standard Report Menu or to a scratch pad to revise quota assignments. Revised quota assignments from the scratch pad can either be permanently saved in the range quota memory file or ignored. See Appendix B for a more detailed description.

l. Quota Scratch Pad Routine (Quotapad.prg)

This module gives the user an opportunity to interactively modify the remaining monthly rifle range quotas for his unit. This can be done an unlimited number of times. Each time the screen display returns to the actual monthly allocation as base data. After each iteration, the new set of range quotas is totaled and compared to the number of rifle range quotas required by the unit for the remainder of the year. A comment is displayed which indicates the net result (scratch pad quotas less than requirements, scratch pad quotas greater than requirements, or scratch pad quotas equal to requirements). However, if the user elects to permanently replace the monthly quota allocation in memory, he may do so by selecting the "Replace Current Quotas" option.

m. Marksmanship Roster Routine (Mksrost.prg)

This routine creates a temporary file which includes NAME, RFLQUAL, RFLDATE, PSTQUAL, PSTDATE for each member in the selected unit or subunit. A standard report format (B:Mrksrpt) is used to display the Marksmanship Roster Report (see Figure 4.7).

n. MOS Status Routine (Mosstat.prg)

This routine produces the MOS Status Report. Each type of MOS in the specified unit or subunit is counted and totaled, regardless of the type or number of different MOS's in the particular unit or subunit. The results are then displayed by MOS and by rank (see Figure 4.8).

c. MOS Roster Routine (Mosrost.prg)

This is a control routine which creates the Personnel Roster for the unit or subunit specified by the user's response to the Slctunit Menu (see Figure 4.9).

```
          MARKSMANSHIP ROSTER REPORT
     NAME          RANK        QUAL DATE        QUAL
     -----         ----        ---------        -----
BAKER, STEVE N.    E4          100184            EX
CARY, R.V.         E5          050184            MM
CASTIN, D.P.       E1          050184            UN
DONNELY, R.W.      E6          DDMMYY            **

PRESS 'ENTER' TO CONTINUE
```

Figure 4.7 Marksmanship Roster Report

```
         MOS STATUS REPORT A CO,  3RD PLAT
MOS           RANK             TOTAL
0311          E1                 8
0311          E2                12
0311          E3                 9
0311          E4                 8
0311          E5                 3
```

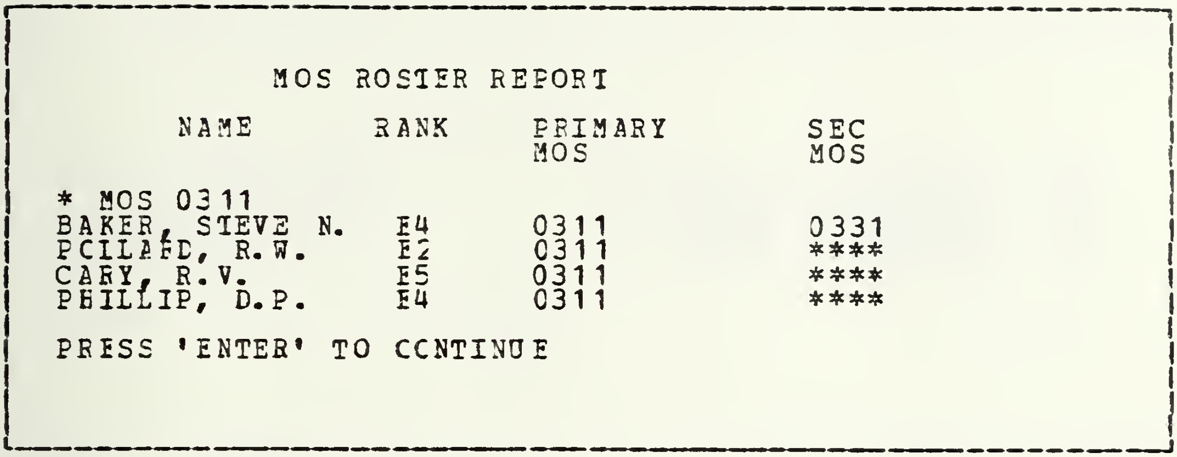
Figure 4.8 MOS Status Report

p. Personnel Data Routine (Persdata.prg)

This is a control routine which creates the Personnel Roster for the unit or subunit specified by the user's response to the Slctunit Menu.

q. Personnel Data Format Routine (Mosrpt.frm)

This defines a dBASE II report format which has already been determined and is stored in memory.



```
             MOS ROSTER REPORT

          NAME        RANK     PRIMARY          SEC
                               MOS              MOS

  * MOS 0311
  BAKER, STEVE N.    E4       0311             0331
  POLLARD, R.W.      E2       0311             ****
  CARY, R.V.         E5       0311             ****
  PHILLIP, D.P.      E4       0311             ****

  PRESS 'ENTER' TO CONTINUE
```

Figure 4.9 MOS Roster Report

r. EST Status Routine (Eststat.prg)

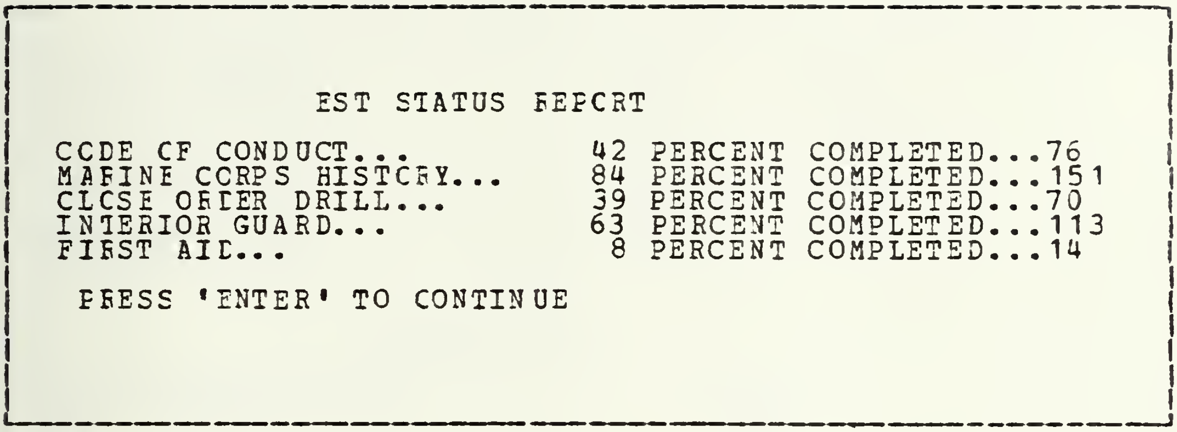
This routine creates a temporary file that includes all essential subject and PFT fields from the Est.dbf for members in a user specified unit or subunit. From this temporary file the routine counts the total number of unit members that have completed all elements in each training category. The EST Status Report is displayed and includes totals for each training category and the percent completed (see Figure 4.10).

s. EST Count Routine (Cntest.prg)

This is a short routine that counts the total training categories containing an "*" which indicates a training element has not been completed (i.e., It counts the number of training categories that currently include one or more training elements that have not been completed).

t. EST Roster Routine (Estrost.prg)

This is a control routine which creates the Personnel Roster Report for the unit or subunit specified by the user's response to the Slctunit Menu.



```
                EST STATUS REPORT
   CODE OF CONDUCT...           42 PERCENT COMPLETED...76
   MARINE CORPS HISTORY...      84 PERCENT COMPLETED...151
   CLOSE ORDER DRILL...         39 PERCENT COMPLETED...70
   INTERIOR GUARD...            63 PERCENT COMPLETED...113
   FIRST AID...                  8 PERCENT COMPLETED...14

    PRESS 'ENTER' TO CONTINUE
```

Figure 4.10 EST Status Report

u. EST Report Format Routine (Estrpt.prg)

This routine formats and displays the EST Roster Report. It is called by Estrost.prg.

v. Swim Qualification Routine (swimqual.prg)

This routine displays the Swim Qual Report for the selected unit or subunit. The Swim Qual Report consists of each Marine's NAME, RANK, UNIT, and swimming qualification status. At the end of the report, summary data is displayed which includes the totals for each qualification category and the overall total for the unit or subunit. Figure 4.11 is a copy of the Swimming Qualification Status Report.

w. Swim Report Routine (Swimrpt.prg)

This routine, called by Swimqual.prg counts and stores the number of personnel in the selected unit or subunit that are in each swimming qualification category. Also, this routine displays the NAME, RANK, COMPANY and swimming qualification for each member of the unit or subunit.

```
BAKER, STEVE N.                  E4       A CO
SWIM QUAL S3

CARY, R.V.                       E5       A CO
SWIM QUAL S2

PHILLIP, D.P.                    E4       A CO
SWIM QUAL WS


               SUMMARY DATA

SWIM QUALIFICATION                    TOTAL
WS                                       3
S1                                      36
S2                                      54
S3                                      49
UNQUALIFIED                             36
                                     --178---

PRESS 'ENTER' TO CONTINUE
```

Figure 4.11 Swimming Qualification Status Report

x. Help Routine (Help.prg)

This routine provides a functional description of each report listed in the Standard Report Selection Menu.

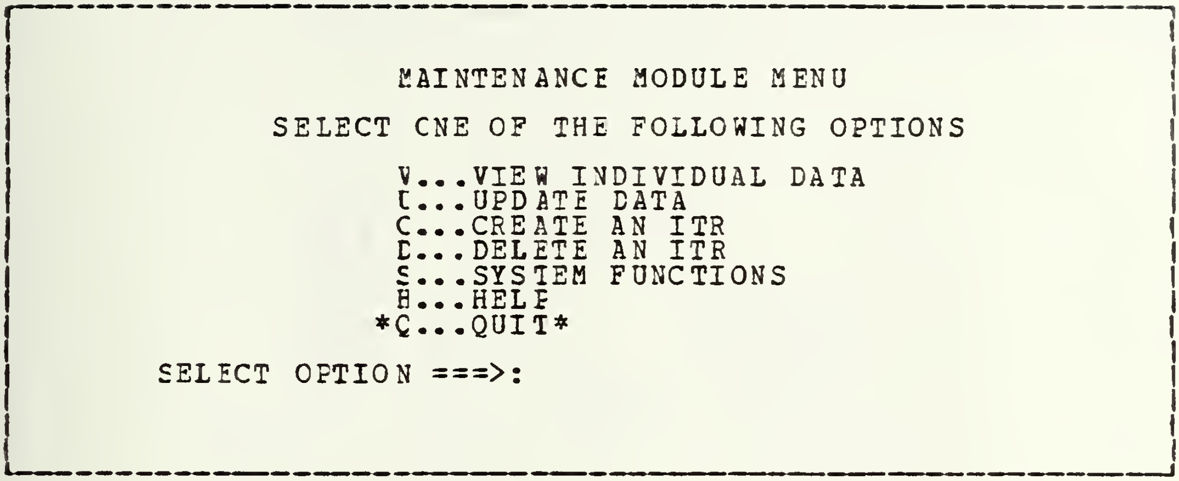
6. <u>Maintenance Module</u>

a. Maintain Control Routine (Maintain.prg)

The Maintain Control Routine produces a menu, Figure 4.12, that allows the user to select the desired function. This module restricts access when the function has a critical capability. Only the Data Base Administrator (DBA) and the Assistant DBA have access to all functions.

b. View Control Routine (Viewitr.prg)

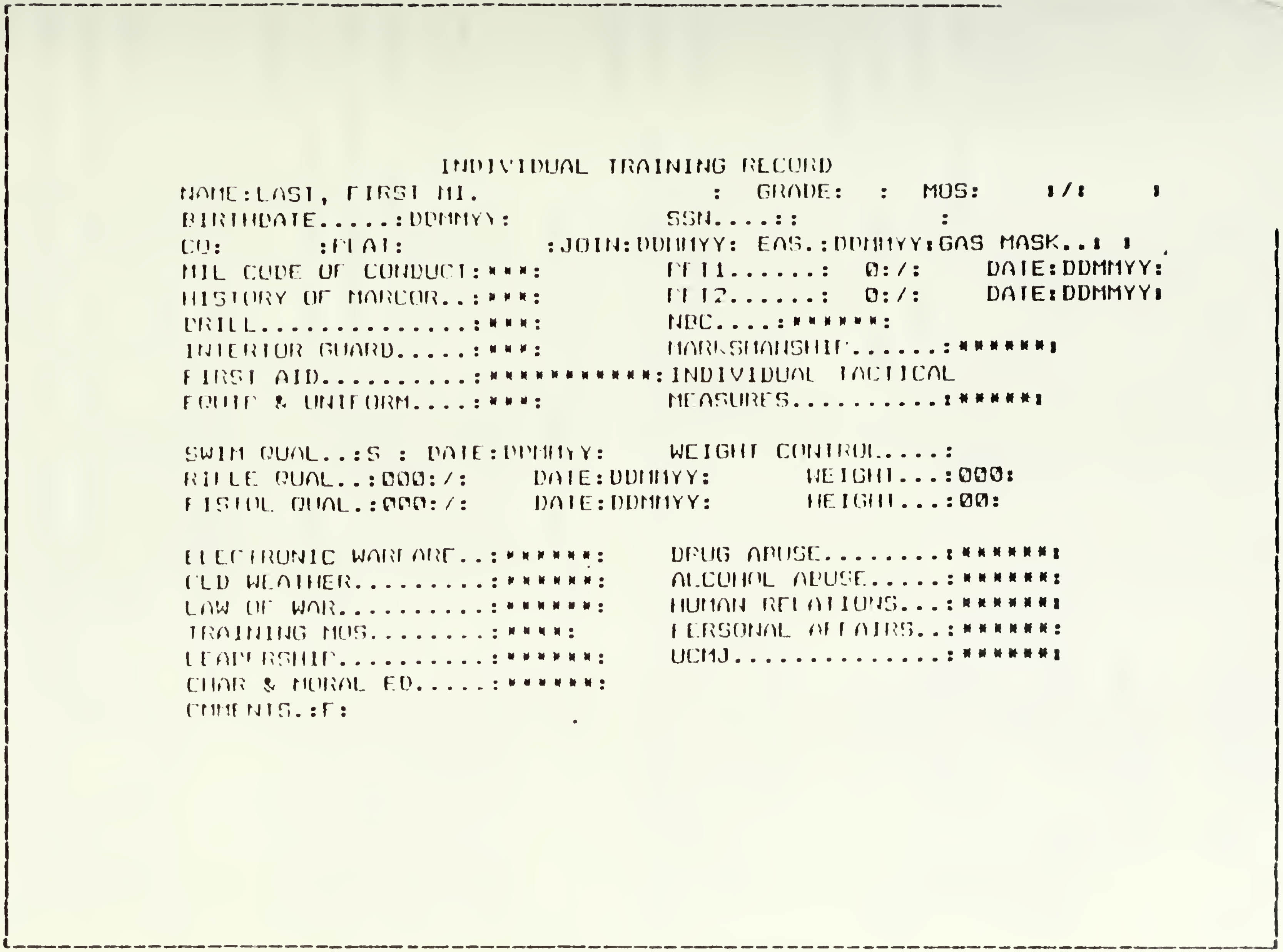
This module queries the user for the name of the individual whose training record is to be viewed. The



```
                MAINTENANCE MODULE MENU

          SELECT ONE OF THE FOLLOWING OPTIONS

                V...VIEW INDIVIDUAL DATA
                U...UPDATE DATA
                C...CREATE AN ITR
                D...DELETE AN ITR
                S...SYSTEM FUNCTIONS
                H...HELP
               *Q...QUIT*

     SELECT OPTION ===>:
```

Figure 4.12 Maintenance Module Menu

routine controls the search and creation of the formatted screen that displays the ITR. The routine asks the user a series of questions that can be answered with yes or no. This routine allows only the data to be displayed (see Figure 4.13).



```
                    INDIVIDUAL TRAINING RECORD
NAME:LAST, FIRST MI.                 :  GRADE:  :  MOS:    :/:    :
BIRTHDATE.....:DDMMYY:             SSN....::          :
CO:      :PLAT:          :JOIN:DDMMYY: EAS.:DDMMYY:GAS MASK..: :
MIL CODE OF CONDUCT:***:           PFT1......:  0:/:     DATE:DDMMYY:
HISTORY OF MARCOR..:***:           PFT2......:  0:/:     DATE:DDMMYY:
DRILL..............:***:           NBC....:*******:
INTERIOR GUARD.....:***:           MARKSMANSHIP......:*******:
FIRST AID..........:************:INDIVIDUAL TACTICAL
EQUIP & UNIFORM....:***:           MEASURES..........:******:

SWIM QUAL..:S : DATE:DDMMYY:       WEIGHT CONTROL.....:
RIFLE QUAL..:000:/:     DATE:DDMMYY:       WEIGHT...:000:
PISTOL QUAL.:000:/:     DATE:DDMMYY:       HEIGHT...:00:

ELECTRONIC WARFARE..:*******:      DRUG ABUSE........:*******:
COLD WEATHER........:*******:      ALCOHOL ABUSE.....:*******:
LAW OF WAR..........:*******:      HUMAN RELATIONS...:*******:
TRAINING MOS........:*****:        PERSONAL AFFAIRS..:*******:
LEADERSHIP..........:*******:      UCMJ..............:*******:
CHAR & MORAL ED.....:*******:
CMMENTS.:F:
```

Figure 4.13   ITR Screen Format

c. ITR Screen Format Routine (Itrscrn.prg)

This routine produces the electronic ITR on which an individual's data is displayed.

d. Screen Data Retrieval Routine (Getdata.prg)

The Getdata.prg communicates with the DBMS and retrieves the data for a particular individual. It then sends the data to the appropriate position on the screen that corresponds to the ITR format. The DBMS locates individuals by their SSN. Four data base files are used to create an ITR; Pers.dbf, Est.dbf, Qual.dbf, and Infomisc.dbf.

e. Comment Retrieval Routine (Getcmmnt.prg)

If unstructured comments exist for an individual, the routine will instruct the DBMS to search for them. The comment information will then be displayed on the screen.

f. Update Control Routine (Updtitr.prg)

The Update Control Routine questions the user concerning which ITR is to be updated. The routine determines if the individual is in the data base and controls the update of the ITR. The routine allows the user to update as many ITR's as desired. The data is displayed on the screen in the ITR format and allows a modified form of full screen editing.

g. Data Update Routine (Updata.prg)

This routine requires the user to type in the name of the field to be updated. The routine then highlights that field and permits data to be entered. When the data has been entered this routine initiates error checking

and initiates calculations. The data is then stored in the data base.

h. ITRM Creation Routine (Creatitr.prg)

The creation of a new ITR for an individual is controlled by this routine. It initiates the formatting of the screen and controls the routine which gathers the data for the individual. The routine allows multiple records to be created.

i. ITR Data Initialization Routine (Indata.prg)

This routine initializes the data base and allows the user to enter data for an individual by field. Once the data has been entered the module initializes error checking and calculations that may pertain to the data fields. If unstructured comments are to be entered, the routine controls this process. The ITR Data Initialization Routine instructs the DBMS to store the data in the appropriate data base files.

j. Data Error Checking Routine (Error.prg)

This routine performs the error checking for the system during data entry. Since this is a prototype system, error checking is not extensive. Dates, value ranges, and acceptable characters are the limits of the error checking. Dates are only checked for limits in number of months, days in the month, and acceptable year window. Specific months are not matched to specific number of days. The system does catch the most common errors caused by gross typing mistakes but may not catch slight errors if the values are within specified limits.

k. Calculation Routine (Calculat.prg)

The Calculation Routine performs the calculations necessary to reproduce training tables concerning weight/height standards, physical fitness standards by age, rifle qualification levels , and pistol qualification levels. When the information that is needed for these calculations has been entered in the data base the system recalculates the related fields and enters the new qualifications in the data base.

l. Comment Update Routine (Wrtcmmnt.prg)

This routine finds the individual's comment record in the data base and updates the information with new data. It then stores the data back into the data base.

m. Comment Creation Routine (Crtcmmnt.prg)

The Comment Creation Routine creates an unformatted comment record for an individual in the data base. The comment record is filled with asterisks that will be typed over when data is inserted.

n. Delete ITR Routine (Deletitr.prg)

This routine is limited to the DBA and Assistant DBA only. The routine queries the user for the name of the individual to be deleted. It then finds the individuals ITRM information and displays the data in ITR format. A second verification, that this individual is to be deleted, is obtained at this time. The module then deletes the individual from all the data base files. This deletion is permanent and there is no recovery of deleted records.

c. System Function Control Routine (System.prg)

The control of system functions is accomplished by this routine. Like all previous routines, this routine is menu driven (see Figure 4.14). The user selects the menu option that performs the desired function, and calls the appropriate routine.

```
                  SYSTEM FUNCTION MENU
           SELECT ONE OF THE FOLLOWING OPTIONS
                  I...INSTALL SYSTEM
                  S...SYSTEM RESET (YEARLY)
                  A...ACCESS LIST MAINTENANCE
                  Q...QUIT TO MAINTENANCE MENU
     ENTER OPTION ===>:
```

Figure 4.14 System Function Menu

p. System Installation Routine (Install.prg)

Units in the Marine Corps often have different names. The system allows the DBA to name his units to correspond to the actual names of the battalion's units. The system also initializes the current year. This information is then stored on a file which is recalled whenever the system is functioning.

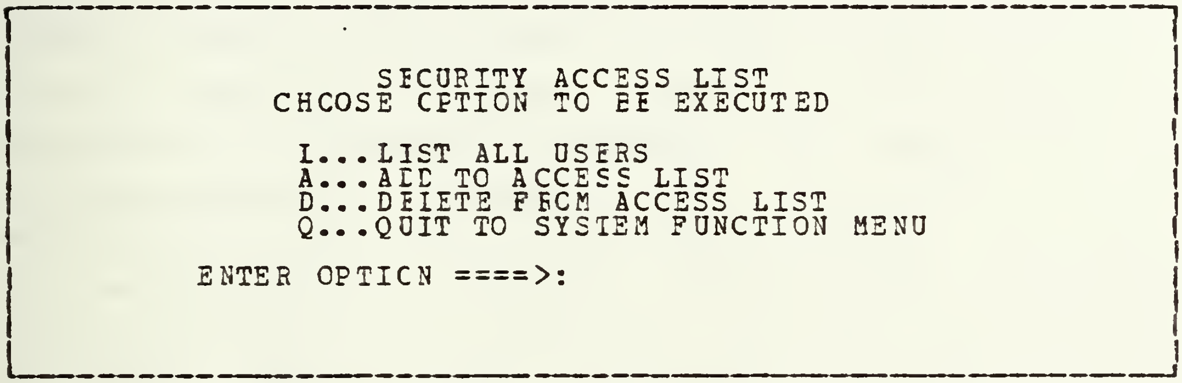
q. System Reset Routine (Sysreset.prg)

Training in the Marine Corps is based on a yearly cycle and requires that individuals requalify in certain areas once or more a year. This routine resets globally all the fields in the data base that must be

requalified each year. The routine allows the DBA to enter the yearly range quotas. The DBA can use this routine to update those quotas, but this is not recommended. The capability also exists in the Standard Report Generators DSS.

r. System Access Control Routine (Rstaccss.prg)

The DBA must be able to change the access list by deletions or additions. This routine displays a menu, (Figure 4.15) that gives the DBA options to choose. This routine gives the DBA the ability to manage access to the system and maintain a list of users. It is not recommended that the DBA keep a printed copy of this list unless it is in a secured environment. The system will list each user, user identification code, user password, and authorization level.



```
                    SECURITY ACCESS LIST
               CHOOSE OPTION TO BE EXECUTED

                L...LIST ALL USERS
                A...ADD TO ACCESS LIST
                D...DELETE FROM ACCESS LIST
                Q...QUIT TO SYSTEM FUNCTION MENU

            ENTER OPTION ====>:
```

Figure 4.15 Access Function Menu

V. CONCLUSION

A. GENERAL

The thesis concept statement is written in general terms and therefore, is subject to qualitative evaluation only. This approach is intended for the following reason. During the conception phase of the project, we had only a vague intuitive "feel" for such things as reasonable system costs, acceptable response times, operator training requirements, and the ultimate "user friendliness" that could be achieved. Because functional requirements are not well defined at this point, an attempt to impose stringent quantitative standards is premature. Furthermore, quantitative goals shift the emphasis toward achieving system efficiency and away from defining system effectiveness. In other words, the purpose of this thesis is to prove a general concept through the development of a working prototype. The general concept includes simplicity of operation and maintenance. System efficiency is not a significant consideration. The reader will notice, however, that system specifications are defined using quantifiable objectives where feasible, the distinction being that the system requirements determined by the user may not be satisfied by the first generation prototype. As the user becomes more familiar with the capabilities of the system, requirements will become more clearly defined. With this approach the overall system concept may be valid while some system requirements have not yet been attained (i.e., in the first generation prototype).

B. SYSTEM SPECIFICATIONS (FUNCTIONAL)

All system specifications, except those referred to below, have been satisfied by the prototype.

1. Storage Limitations

The prototype cannot adequately handle the specified 800 records . The limiting constraint is available storage. All system software resides on four double-sided, double-density 5 1/4 inch floppy disks (360k bytes each). The first two disks are program disks which are stored directly into RAM memory. The second two disks contain all of the data base files. Data base files are read into working storage only when they are being used by the system. Each Marine in the data base requires approximately 550 bytes of data (or 4.4k bits). Due to the DBMS's required overhead the prototype can accommodate approximately 180 Marines. In order to achieve the specification requirement of 800 Marines, a storage device capacity of two megabytes or more is required (e.g., hard disk drive).

2. Retrieval Limitations

All standard reports can be retrieved by unit or subunit. However, the standard report does not include the facility to retrieve data by other user defined attributes This facility is, however, included in the nonstandard report. The nonstandard report may include up to three user defined attributes and attribute descriptions.

C. SYSTEM SPECIFICATIONS (NON-FUNCTIONAL)

1. Training

Most of the non-functional specifications relate to the operator training effort required to implement the

system. It is our judgement that the prototype satisfies these requirements.

2. Error Checking

Operator input is range checked, data type checked, and checked for field length (characters in excess of the maximum field length are truncated). In a fully implemented system error checking would be expanded and diagnostic error messages sent to the user.

3. Table Mapping

Mapping of rifle, pistol and PFT scores into qualification categories is invisible to the user. In addition, a weight control table is embedded. When an individual's height and weigh are entered the weight control table is referenced. If his weight is in excess of allowable standards for his height, he is automatically assigned to the "weight control program" by assigning a boolean variable of "T" to the weight control field in his training record.

D. SUBSEQUENT SYSTEM DEVELOPMENT

The next step in the development of the system is to place the system into the hands of the user to accomplish the following objectives:

a. Define user training requirements;

b. Achieve user familiarity;

c. Evaluate and quantify existing functional requirements;

d. Define additional quantifiable functional requirements;

e. Design and develop second generation prototype based on new set of user defined functional requirements.

E. SUMMARY

The objective of the Thesis was to prove the feasibility of a concept. It is reasonable to conclude that the concept has been proven through the design, the implementation, and the demonstration of a working prototype.

APPENDIX A

DATA ELEMENT DICTIONARY

All data elements that exist in the individual training data management system are contained in one of seven data base files. The only exception is the data element SSN. SSN is a key field field and is therefore included in the record structure of multiple files. The following information is used to describe each data base file:

A. FIELD

Each data element belongs to a specific field within the record structure. Fields are numbered sequentially. For example, field 03 in the data base file called Pers is the data element named Rank.

B. NAME

Each data field has a unique name which always refers to that specific information that is contained in the data field (example; PrimeMOS contains the primary MOS of each member in the data base).

C. TYPE

Each data field is defined to be one of three possible data types:

1. Character (C)
2. Numeric (N)
3. Logical (L)

D. WIDTH

This characteristic describes the maximum length of the data field. Information in the data field may not exceed the number of spaces that have been set aside for that particular field (all characters and blanks are included when counting the number of spaces in a field).

E. DESCRIPTION

This column contains a narrative description of the field. In many instances, examples (Ex.) are used to describe the structure of a typical data element.

F. DATA BASE FILES

1. Pers (Personnel)

Field	Name	Type	Width	Description
01	SSN	C	09	Ex. 240707765
02	Name	C	30	Last name followed by a comma, First name and Middle Initial. (Ex. Smith, Jack E.)
03	Rank	C	02	Pay grade (Ex. E2, 01)
04	Primemos	C	04	Primary Military Occupational Specialty (Ex. 0311)
05	Secmos	C	04	Secondary MOS
06	Company	C	06	Ex. A CO, HHS CO, A BTRY
07	Platoon	C	09	Ex. 1ST PLAT, GUN PLAT, WPSN PLAT, HDQTRS
08	Joindate	C	06	The date (DDMMYY) member joined the unit.
09	EAS	C	06	Expiration of Active Service (DDMMYY)
10	Brthdate	C	06	Date of birth (DDMMYY)
11	Comment	L	01	A boolean variable (F/T) for which T indicates that a comment record exists.
12	Height	C	02	Individual's height in inches
13	Weight	C	03	Individual's weight in pounds
14	Wtccnt	L	01	A boolean variable (F/T) for which T indicates that the individual is on weight control.
15	Gasmask	C	01	Gas mask size (S, M, L)

2. EST (Essential Subjects Testing)

Field	Name	Type	Width	Description
01	SSN	C	09	EX. 240707765
02	COC	C	03	Code of Conduct contains an entry for each training element (A,B,C).
03	HIS	C	03	History of the Marine Corps contains an entry for each training element (A,B,C).
04	COD	C	03	Close Order Drill contains an entry for each training element (A,B,C).
05	INT	C	03	Interior Guard contains an entry for each training element (A,B,C).
06	AID	C	11	First Aid contains an entry for each training element (A,B,C,D,E,F,G,H,I,J,K).
07	UNI	C	03	Equipment & Uniforms contains an entry for each training element (A,B,C).
08	PFT1RAW	N	03	Includes the numeric score for the first annual physical fitness test (RANGE:00-300).
09	PFT1DATE	C	06	Date of first physical fitness test (DDMMYY).
10	PFT1CLSS	C	01	Results of first physical fitness test (1,2,3,U).
11	PFT2RAW	N	03	Includes the numeric score for the second annual physical fitness test (RANGE: 00-300).
12	PFT2DATE	C	06	Date of the second physical fitness test.
13	PFT2CLSS	C	01	Results of second physical fitness test (1,2,3,U).
14	NBC	C	06	NBC contains an entry for each training element (A,B,C, D,E,F).
15	MKS	C	06	Marksmanship contains an entry for each training element (A,B,C,D,E,F).
16	TAC	C	05	Individual Tactical Measures contains an entry for each training element (A,B,C,D,E).

3. QUAL (Qualifications)

Field	Name	Type	Width	Description
01	SSN	C	09	EX. 240707765
02	SWIMQUAL	C	02	Swimming Qualification (WQ, S1,S2,S3).
03	SWIMDATE	C	06	SWIMQUAL date (DDMMYY).
04	RFLSCORE	C	03	Numeric rifle score (RANGE: 000-250).
05	RFLQUAL	C	02	Rifle Qualification (EX,SS, MM,UN).
06	RFLDATE	C	06	Date of RFLQUAL (DDMMYY).
07	PSTSCORE	C	03	Numeric pistol score (Range: 000-300).
08	PSTQUAL	C	02	Pistol Qualification (EX,SS, MM,UN).
09	PSTDATE	C	06	Date of PSTQUAL (DDMMYY).

4. INFOMISC (Information Miscellaneous)

Field	Name	Type	Width	Description
01	SSN	C	09	EX. 240707765
02	ELECWAR	C	06	Electronic Warfare contains an entry for each training element (A,B,C,D,E,F).
03	CLDWTHR	C	06	Cold Weather Training contains an entry for each training element (A,B,C,D,E,F).
04	LAWWAR	C	06	Law of War contains an entry for each training element (A,B,C,D,E,F).
05	MOS	C	04	MOS Training contains an entry for each training element (A,B,C,D).
06	LDRSHP	C	06	Leadership Training contains an entry for each training element (A,B,C,D,E,F).
07	DRUG	C	06	Drug Abuse contains an entry for each training element (A,B,C,D,E,F).
08	ALCOHOL	C	06	Alcohol Abuse contains an entry for each training element (A,B,C,D,E,F).
09	HUMREL	C	06	Human Relations contains an entry for each training element (A,B,C,D,E,F).
10	PERSAFFR	C	06	Personal Affairs contains an entry for each training element (A,B,C,D,E,F).
11	UCMJ	C	06	UCMJ contains an entry for each training element (A,B,C,D,E,F).
12	CHRMORED	C	06	Character and Moral Education contains an entry for each training elements(A,B,C,D,E,F).

5. SECURITY (Access Information)

Field	Name	Type	Width	Description
01	USERID	C	05	Numeric code that uniquely identifies each user.
02	USERPASS	C	08	Alphanumeric code that uniquely identifies each user.
03	AUTHLEV	N	01	Numeric code that defines authorization level for each user.
04	NAME	C	15	Alphanumeric that identifies the user.

6. COMMENTS (Non-formatted Information)

Field	Name	Type	Width	Description
01	SSN	C	09	EX. 240707765
02	INFOTXT1	C	25	Unstructured comments.
03	INFOTXT2	C	25	Unstructured comments.
04	INFOTXT3	C	25	Unstructured comments.
05	INFOTXT4	C	25	Unstructured comments.
06	INFOTXT5	C	25	Unstructured comments.
07	INFOTXT6	C	25	Unstructured comments.

08	INFOTXT7	C	25	Unstructured comments.
09	INFOTXT8	C	25	Unstructured comments.
10	INFOTXT9	C	25	Unstructured comments.
11	INFOTXT0	C	25	Unstructured comments.

APPENDIX B

DECISION SUPPORT SYSTEM (DSS) DESCRIPTION

A. BACKGROUND

The management of training records includes many routine tasks that are repetitious and highly structured. Many of these tasks incorporate low level, well-defined or semi-structured, independent decision making processes. Heretofore, these tasks have been manually implemented at the cost of many manhours, and sometimes decisions have been made without making the best use of available information. Too often the result has been wasted effort, frustration, and incorrect decisions.

B. PURPOSE

The purpose of this submodule is to demonstrate the application of a "first generation" prototype DSS that will achieve the following:

a. Demonstrate typical capabilities of DSS in the training management environment.

b. Demonstrate the small knowledge base necessary to implement a properly designed DSS.

c. Serve as a "functioning prototype" to gain early user support and experience in order to further refine system requirements.

C. FUNCTIONAL DESCRIPTION

The DSS element of the software system product is implemented in the "Marksmanship Status Report" routine which is

called by the "Standard Report Generator". When the user selects the "Marksmanship Status Report" from the "Standard Report Menu" the DSS submodule is implemented. The DSS submodule performs the following functions at the company level:

- a. Calculates and displays a current "Marksmanship Status Report" which includes:
  - (1) A summary of rifle and pistol current year requalification data (number of experts, sharpshooters, marksmen, and unqualified).
  - (2) The total number of persons that have fired for qualification during the current year.
  - (3) The percent of experts, sharpshooters, marksmen and unqualified shooters based on the total number of people that have fired for qualification during the current year.
- b. A company rifle range quota analysis may then be performed at the user's discretion. This routine includes the following functions:
  - (1) Calculates and displays a range quota analysis.
  - (2) The following summary information is displayed:
    - (a) Total number of Marines fired for qualification during current year.
    - (b) Total number of Marines fired for qualification during current year, but failed to qualify.
    - (c) Total number of Marines not required to fire for qualification during the current year.
    - (d) Total number of Marines to qualify before the end of the current year.
  - (3) A chart is displayed which shows the months remaining in the current year, the number of range

quotas allocated for each month, and the total number of rifle range quotas that remain for the current year.

(4) As appropriate, one of the following elements of information is displayed:

(a) Additional quota requirements for the year

(b) Excess quotas allocated for the year

(c) Quota requirements (number of person left to qualify) equal quota allocations.

c. User's may manipulate allocations on a scratch pad to visualize different combinations of monthly quota allocations or to determine their effect on end of year results (the objective is to manage quotas so that quota requirements equal quotas allocated). If desired, a set of "scratch pad" range quotas can permanently replace the unit's range quota allocations for the remainder of the current year. If this option is elected all subsequent calculations will be based on the "new set of range quota allocations".

D. USER'S VIEW

1. Summary Information

Decision making is supported by providing summary information for the company. This snapshot of a unit's current marksmanship status demonstrates the degree of success of the unit's marksmanship training program. By comparing this summary to unit marksmanship objectives the system can be used as a control mechanism. The following types of decisions can be supported:

(1) Evaluate marksmanship training program for weaknesses as indicated by unsatisfactory qualification results to date.

(2) Evaluate unit qualification objectives for feasibility.

2. Support Depth

Decision making is supported at many levels from the platoon or company training NCO to the battalion operations officer.

3. Interdependence

Interdependent (sequential and pooled) decisions are supported. For example, if one company permanently changes rifle range quota allocations this decision is captured by the system and reflected in any subsequent analysis

4. Restrictions

Due to the overriding system requirement for limited user training all processes are menu driven. This restricts the degree of user control and flexibility. This is a significant compromise which reduces its effectiveness as a DSS.

E. BUILDER'S VIEW

1. Dialogue

The dialogue subsystem (implemented in dBase II) creates the user's view as discussed above. It performs all necessary data base functions, extracts and processes summary information.

2. Modelling

The model base subsystem includes the mathematical and process models necessary to use the "scratch pad" utilities. For example, a model file is constructed in memory for each unit which has allocated quotas. Quotas can be

selectively extracted, compared, permanently changed by the user (provided the user has the appropriate system access authorization). Models are not integrated, but each model is fully integrated with the DBMS through the query language. Integration of models is a desirable feature (e.g., battalion should have the capability to total the quotas of all companies on a monthly basis or on a remaining current year basis) and could be implemented. This is the type of added requirement that should be defined by the user during operation of this "first generation" prototype.

F. CONTENTS OF KNOWLEDGE BASE

Data Base files (DBF) contain qualification status of each member for the current year and members not required to fire for qualification during the current year.

Memory files (MEM) containing rifle range quotas for each company are stored in separate memory files (see Figure B.1 for example).

```
        CORNGQTA.MEM
     VARIABLE NAME          VALUE

     QJAN                    25
     QFEB                    25
     QMAR                    25
     QAPR                    25
     QMAY                    50
     QJUN                    50
     QJUL                    50
     QAUG                    50
     QSEP                    00
     QOCT                    00
     QNOV                    00
     QDEC                    00
```

Figure B.1 Memory File

APPENDIX C

ITRS MASTER CONTROL MODULE LISTING

A. MASTER ROUTINE

```
* Routine Name: Master.prg
* Module Name: ITRS Master Control Module
* Version: 1.0
* Author: D.P. Haeusler
* Date: 28 Oct 83
* Variables Used: Thru, Valpass
* Variables Modified: None
* Variables Created: None
* Variables Released: None
* Files (opened/closed): None
* Temp Files Created: None
* Using Subroutines: None
* Description: This is the routine that controls the flow
* of the program.  This routine is an endless loop which
* requires the user to turn the computer off in order to
* enter another system.  This routine does not allow the
* users to directly enter the DBMS, the general intent is
* to make the DBMS completely transparent to users. Some
* house keeping is done to insure that the proper disks
* are in place.  This occurs by reading stored files on
* the disks and then checking the values.  The system will
* not continue untill the disks are in the proper drive.

SET CONSOLE ON
SET TALK OFF
SET ESCAPE OFF

STORE T TO AAENDLES
STORE F TO SWITCH
DO WHILE .NOT. SWITCH

   ERASE
   @ 9,25 SAY " REMOVE DISKETTES FROM THE DRIVES"
   @ 10,25 SAY " PLACE 'A' DATA DISK IN DRIVE 'A'"
   @ 11,25 SAY " PLACE 'B' DATA DISK IN DRIVE 'B'"
   @ 23,25 SAY "***** PRESS ANY KEY TO CONTINUE *****"
   SET CONSOLE OFF
   WAIT
   SET CONSOLE ON
   RESTORE FROM A:MEMDISK ADDITIVE
ENDDO
DO WHILE AAENDLES
   ERASE
   @ 10,27 SAY " UNITED STATES MARINE CORPS"
   @ 11,23 SAY " INDIVIDUAL TRAINING RECORD SYSTEM"
   @ 12,34 SAY "(PROTOTYPE)"
DO PAUSE
   @ 23,23 SAY "***** PRESS ANY KEY TO CONTINUE *****"
SET CONSOLE OFF
WAIT
SET CONSOLE ON
DO Access
RESTORE FROM A:MEMDISK ADDITIVE
STORE F TO SYSDATE
DO WHILE .NOT. SYSDATE .AND. AAVALPAS
   ERASE
```

```
   @ 11,24 SAY "ENTER TODAY'S DATE"
   ACCEPT "        DATE (DDMMYY) ===> " TO SYSDAY
   IF VAL($(SYSDAY,1,2)) < 32 .AND. VAL($(SYSDAY,3,2));
      < 13 .AND. VAL($(SYSDAY,5,2)) = CRNTYR
      STORE SYSDAY TO AADATE
      STORE T TO SYSDATE
   ELSE
      ERASE
      @ 8,24 SAY "IMPROPER DATE--REENTER"
      @ 9,24 SAY "**PRESS ANY KEY TO CONTINUE**"
      SET CONSOLE OFF
      WAIT
      SET CONSOLE ON
   ENDIF
ENDDO
RELEASE ALL EXCEPT AA??????
IF AAvalpas
   DO Cmddet
ENDIF
STORE T TO AAENDLESS
ENDDO
```

B. PAUSE ROUTINE

```
* Routine Name: Pause.prg
* Module Name: ITRS Master Control Module
* Version: 1.0.0.0.1.0
* Author:D.P. Haeusler
* Date: 30 Nov 83
* Variables Used: pause
* Variables Modified: pause
* Variables Created: pause
* Variables Released: pause
* Files (opened/closed): none
* Temporary Files Created: none
* Using Subroutines: Access.prg, Maintain.prg, Master.prg
* Description: This routine creates a delay while a message
* is being displayed.

STORE 1 TO pause
DO WHILE pause < 75
   STORE pause + 1 TO pause
ENDDO

RELEASE pause
RETURN
```

APPENDIX D

ACCESS MODULE LISTING

A. ACCESS ROUTINE

```
* Routine Name: Access.prg
* Module Name: Access Module
* Version: 2.0
* Author: D.P. Haeusler
* Date: 28 Oct 83
* Variables Used: aavalpass, password, idnum, validid,
*                 counter, thru, pause, passrec, aalevel
* Variables Modified: thru, aavalpass, validid, idnum,
*                     password, counter, pause, passrec,
*                     aalevel
* Variables Created: aavalpass, password, idnum, validid,
*                    counter, pause, thru, passrec,
*                    aalevel
* Variables Released: counter, pause, passrec, validid,
*                     thru
* Files (opened/closed): a:security (opened/closed)
* Temporary Files Created: none
* Using Subroutines: Master
* Description: This routine conducts the logon procedures
* to gain access into the system.  The routine will query
* the user for a user ID and a Password, after three
* incorrect responses the session will be terminated.
*
*  BEGIN Access

STORE f TO thru
STORE f TO AAvalpas
STORE "        " TO password
STORE "     " TO idnum
STORE f TO validid
STORE 0 TO counter

DO WHILE .NOT. validid .AND. .NOT. thru

   ERASE
   @ 12,25 SAY " ENTER ITRS USER NUMBER OR "
   @ 13,25 SAY " 'QUIT' TO TERMINATE SESSION "


   ACCEPT "         ENTER USER NUMBER ====> " TO idnum
   STORE !(idnum) TO idnum

   IF idnum = 'QUIT'
      STORE t TO thru
   ELSE
      ERASE
      USE A:SECURITY INDEX A:SECINDX
      FIND &IDNUM
      IF # = 0
         USE
      ELSE
         STORE TRIM (USERPASS) TO PASSREC
         STORE AUTHLEV TO AALEVEL
         STORE T TO VALIDID
      ENDIF
   ENDIF
```

```
  IF .NOT. validid .AND. .NOT. thru .AND. COUNTER <> 2
    STORE counter+1 TO counter
    ERASE
    @ 15,25 SAY "INVALID USER NUMBER"
    @ 17,25 SAY " CHECK YOUR NUMBER "
    DO pause
  ELSE
    IF .NOT. VALIDID .AND. .NOT. THRU .AND. COUNTER = 2
      STORE COUNTER+1 TO COUNTER
    ENDIF
  ENDIF

  IF counter = 3
    STORE t TO thru
    ERASE
    @ 12,20 SAY "***************************************"
    @ 13,20 SAY "********** TERMINATE ACCESS ***********"
    @ 14,20 SAY "***************************************"
  ENDIF

ENDDO

STORE 0 TO counter
DO WHILE .NOT. AAvalpas .AND. .NOT. thru

  ERASE
  @ 7,25 SAY " ENTER YOUR PASSWORD  OR "
  @ 8,25 SAY " 'QUIT' TO TERMINATE THE SESSION"
  @ 11,18 SAY " THE PASSWORD WILL NOT BE DISPLAYED "
  @ 14,25 SAY " ENTER PASSWORD ====> "

  SET CONSOLE OFF

  ACCEPT " ENTER PASSWORD ==> " TO password

  SET CONSOLE ON

  IF !(password) = 'QUIT'
    STORE t TO thru
  ELSE
    IF !(password) = passrec
      STORE t TO AAvalpas
    ELSE
      IF COUNTER <> 2
        STORE counter+1 TO counter
        ERASE
        @ 12,25 SAY " INVALID PASSWORD "
        @ 14,25 SAY " CHECK YOUR PASSWORD"
        DO pause
      ELSE
        STORE COUNTER+1 TO COUNTER
      ENDIF 3
    ENDIF 2
  ENDIF 1

  IF counter = 3
    STORE t TO thru
    ERASE
    @ 12,20 SAY "***************************************"
    @ 13,20 SAY "*********** TERMINATE ACCESS **********"
    @ 14,20 SAY "***************************************"
  ENDIF
ENDDO
RELEASE counter, pause, passrec, validid, THRU
RETURN
```

APPENDIX E

COMMAND DETERMINER MODULE LISTING

A. COMMAND DETERMINER ROUTINE

```
* Routine Name: Cmddet.prg
* Module Name: Command Determiner Module
* Version: 3.0
* Author: D.P. Haeusler
* Date: 30 Oct 83
* Variables Used: aafinish, cmdopt, helpopt
* Variables Modified: aafinish, cmdopt, helpopt
* Variables Created: aafinish, cmdopt, helpopt
* Variables Released: cmdopt, aafinish, helpopt
* Files (opened/closed): none
* Temporary Files Created: none
* Using Subroutines: Master
* Description: This routine creates a menu which is used
* to determine which options of the program will be
* executed by the user.  These options allow the user to
* control the use of the DBMS by the program.

STORE f TO AAfinish

DO WHILE .NOT. AAfinish
   ERASE
   @ 2,17 SAY "           USMC INDIVIDUAL TRAINING       "
   @ 3,17 SAY "                RECORD SYSTEM             "
   @ 5,17 SAY "                   MAIN MENU              "
   @ 7,17 SAY "    SELECT ONE OF THE FOLLOWING OPTIONS BY"
   @ 8,17 SAY "      ENTERING THE APPROPRIATE LETTER     "
   @ 10,17 SAY "      D...DATA ENTRY AND SYSTEM FUNCTIONS"
   @ 11,17 SAY "      S...STANDARD REPORTS               "
   @ 12,17 SAY "      N...NONSTANDARD REPORTS            "
   @ 13,17 SAY "      H...HELP                           "
   @ 14,17 SAY "      Q...QUIT                           "

   ACCEPT "     SELECT OPTION ====>" TO cmdopt

   DO CASE
      CASE !(cmdopt) = 'D'
         DO maintain
         STORE f TO AAfinish
      CASE !(cmdopt) = 'S'
         DO STDRPT
         STORE f TO AAfinish
      CASE !(cmdopt) = 'N'
         DO nstddet
         STORE f TO AAfinish
      CASE !(cmdopt) = 'H'
         STORE 1 TO HELPOPT
         DO B:HELP2
         STORE f TO AAfinish
      CASE !(cmdopt) = 'Q'
         STORE t TO AAfinish
   ENDCASE
ENDDO
RELEASE cmdopt, HELPOPT, aafinish
RETURN
```

B. HELP2 ROUTINE

```
* Routine Name: Help2.prg
* Module Name: Maintenance Module
* Version: 3.0.1
* Author: D.P. Haeusler
* Date: 6.0.1.0
* Variables Used: helpopt
* Variables Modified: none
* Variables Created: none
* Variables Released: none
* Files (opened/closed): none
* Temporary Files Created: none
* Using Subroutines: Maintain.prg, Cmddet.prg
* Description: This routine gives a brief description of
* the commands that can be invoked by the user.

ERASE
DO CASE
   CASE HELPOPT = 1
   TEXT

     D...DATA ENTRY AND SYSTEM FUNCTIONS:  This module
allows the user to enter data on individual Marines into
the data base and to modify data for system functions.
Installation occurs in this module and any manipulation of
the data such as corrections and updates of of the
information.

     S...STANDARD REPORTS:  This module produces reports
that are used on a day in and day out basis.  The reports
are displayed on the screen and if a paper copy is required
while the data is still on the, press the shift key and the
prtsc key at the same time, this will print everything on
the screen.

     N...NONSTANDARD REPORTS:  This module allows the users
to construct thier own queries of the data base.  It
prompts you for the infor- mation to make a query.  Paper
copies of the reports can obtained by the same method as in
Standard Reports.
        ENDTEXT
        @ 23,15 SAY " **** PRESS ANY KEY TO CONTINUE ****"
        SET CONSOLE OFF
        WAIT
        SET CONSOLE ON
     CASE HELPOPT = 2
        TEXT

     V...VIEW INDIVIDUAL DATA:  This module prompts you for
the name of an individual whose ITR you wish to see.  This
module does not allow you to change any fields all you can
do is scan the data.

     U...UPDATE DATA:  This module allows you to change or
enter data in any field of any ITR.  The ITR must already
exist and is identified by the individuals name.  You only
need to enter enough of the name to be able to distinguish
it from another Marines name.

     C...CREATE AN ITR:  This module allos the creation of
new ITR's.  It will prompt you to enter all the appropriate
data.  Enter the data in one field at a time.  If no data
is to entered in that field, strike the enter key leaving
the field empty.

     D...DELETE AN ITR:  This module allows the Data Base
Administrator to delete records in the data base.  Once a
```

```
record has been deleted it is gone forever and can not be
recovered.  Access to this module is restricted.

     S...SYSTEM FUNCTIONS:  This module allows the
housekeeping of the system to be accomplished by the Data
Base Administrator.  Access to this module is restricted.
          ENDTEXT
          @ 23,15 SAY " **** PRESS ANY KEY TO CONTINUE ****"
          SET CONSOLE OFF
          WAIT
          SET CONSOLE ON
ENDCASE
RETURN
```

APPENDIX F

NONSTANDARD COMMAND GENERATOR MOUDLE LISTING

A. NONSTANDARD REPORT ROUTINE

```
* ROUTINE NAME:  NOSTDRPT.PRG
* MODULE NAME:  NONSTANDARD COMMAND GENERATOR
* VERSION: 4.0
* AUTHOR: R.E. PRUIETT
* DATE:04FEB84
* VARIABLES USED: MATRI1, DESC1, MATRI2, DESC2, MATRI3,
* DESC3, SLCT1, SLCT2, SLCT3
* VARIABLES MODIFIED: MREPEAT, COUNT, PROCEED
* VARIABLES CREATED: MREPEAT, COUNT, PROCEED
* VARIABLES RELEASED: M???????, REPEAT, COUNT,
* ATRI????, SLCT????, DESC????
* FILES OPENED/CLOSED: A:PERS, B:EST, B:QUAL
* TEMP FILES CREATED: TEMP, SLCTDATA, TEMP2, TEMP3
* USING SUBROUTINES: COMMAND DETERMINER MODULE
* DESCRIPTION: THIS MODULE SEARCHES THE APPROPRIATE
* DATABASE FILES IN ORDER TO LOCATE AND DISPLAY ALL RECORDS
* THAT SATISFY A SET OF FROM ONE TO THREE USER SPECIFIED
* ATTRIBUTES.
*
STORE T TO MREPEAT
DO WHILE MREPEAT = T
 STORE F TO MREPEAT
 ERASE
 @ 10,25 SAY "NONSTANDARD COMMAND GENERATOR"
 @ 20,0  SAY "PRESS 'H' FOR HELP"
 @ 21,0  SAY "       OR "
 ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
 IF !(PROCEED)= "H"
   DO A:NOSTDHLP
   STORE T TO MREPEAT
 ENDIF
ENDDO
ERASE
@ 1,25 SAY "NONSTANDARD COMMAND GENERATOR"
@ 3,5  SAY "WHEN PROMPTED ENTER AN ATTRIBUTE AND A";
"DESCRIPTOR FOR EACH"
@ 4,5  SAY "CONDITION STATEMENT DESIRED.          "
@ 6,10 SAY "LOCATE ALL MARINES THAT SATISFY THESE;
CONDITIONS:"
@ 8,10  SAY "    <ATTRIBUTE>                    <DESCRIPTOR>"
@ 9,10  SAY "    ___________           IS       ____________"
@ 20,0
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED

STORE T TO MREPEAT
STORE 0 TO COUNT
DO WHILE MREPEAT = T .AND. COUNT <= 3
  STORE COUNT + 1 TO COUNT
  STORE F TO MREPEAT
  DO SLCTATRI
  ERASE
  DO CASE
   CASE COUNT = 1
     @ 1,0 SAY "<ATTRIBUTE>                   <DESCRIPTION>"
     @ 2,0 SAY "___________                   ____________  "
     @ 4,6 SAY MATRI1
```

```
     @ 4,30 SAY "IS"
     @ 4,48 SAY DESC1
   CASE COUNT = 2
     @ 1,0 SAY "<ATTRIBUTE>               <DESCRIPTION>   "
     @ 2,0 SAY "                                          "
     @ 4,6 SAY MATRI1 @ 4,30 SAY "IS"------------
     @ 4,48 SAY DESC1
     @ 6,30 SAY "AND"
     @ 8,6 SAY MATRI2
     @ 8,30 SAY "IS" @ 8,48 SAY DESC2 CASE COUNT = 3
     @ 1,0 SAY "<ATTRIBUTE>              <DESCRIPTION>   "
     @ 2,0 SAY "-------------            ------------    "
     @ 4,6 SAY MATRI1
     @ 4,30 SAY "IS"
     @ 4,48 SAY DESC1
     @ 6,30 SAY "AND"
     @ 8,6 SAY MATRI2
     @ 8,30 SAY "IS"
     @ 8,48 SAY DESC2
     @ 10,30 SAY "AND"
     @ 12,6 SAY MATRI3
     @ 12,30 SAY "IS"
     @ 12,48 SAY DESC3
  ENDCASE
  IF COUNT < 3
     @ 20,0 SAY "DO YOU WANT TO INCLUDE ANOTHER CONDITION";
     "STATEMENT?"
     ACCEPT "(Y/N) ===>" TO PROCEED
     IF PROCEED = "Y"
        STORE T TO MREPEAT
     ENDIF
  ENDIF
  IF PROCEED = "N" .OR. COUNT >= 3
     @ 22,0
     ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
  ENDIF
ENDDO

ERASE
IF COUNT = 1
  DO CASE
     CASE (SLCT1 >= "A" .AND. SLCT1 <= "I")
       USE A:PERS
       DISPLAY ALL FOR &ATRI1 = "&DESC1" OFF FIELDS;
       NAME,SSN,&ATRI1
       IF EOF
          @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
     CASE (SLCT1 = "J" .OR. SLCT1 = "K")
       USE B:EST
       COPY TO A:TEMP FIELD SSN,&ATRI1 FOR &ATRI1 =;
       "&DESC1"
       SELECT PRIMARY
       USE A:TEMP
       SELECT SECONDARY
       USE A:PERS
       JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
       NAME,SSN,&ATRI1
       USE SLCTDATA
       DISPLAY ALL
       IF EOF
          @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
     CASE (SLCT1 >= "L" .AND. SLCT1 <= "N")
       USE B:QUAL
       COPY TO A:TEMP FIELD SSN,&ATRI1 FOR &ATRI1 =;
       "&DESC1"
       SELECT PRIMARY
       USE A:TEMP
```

```
       SELECT SECONDARY
       USE A:PERS
       JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
       NAME,SSN,&ATRI1
       USE SLCTDATA
       DISPLAY ALL
       IF EOF
          @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
  ENDCASE
  ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
ENDIF

IF CCUNT = 2
  DO CASE
     CASE (SLCT1 >= "A" .AND. SLCT1 <= "I") .AND.;
          (SLCT2 >= "A" .AND. SLCT2 <= "I")
          USE A:PERS
          COPY TO A:TEMP FIELD NAME,SSN,&ATRI1,&ATRI2 FOR;
          &ATRI1="&DESC1"
          USE A:TEMP
          DISPLAY FOR &ATRI2="&DESC2" OFF FIELDS;
          NAME,SSN,&ATRI1,&ATRI2
          IF EOF
             @ 23,50 SAY "SEARCH COMPLETE"
          ENDIF
    CASE (SLCT1 >= "A" .AND. SLCT1 <= "I") .AND.;
         (SLCT2 = "J"  .OR.  SLCT2 = "K")
         USE B:EST
         COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2 =;
         "&DESC2"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE A:PERS
         JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
         NAME,SSN,&ATRI1,&ATRI2
         USE SLCTDATA
         DISPLAY FOR &ATRI1 = "&DESC1" OFF FIELDS;
         NAME,SSN,&ATRI1,&ATRI2
          IF EOF
             @ 23,50 SAY "SEARCH COMPLETE"
          ENDIF
    CASE (SLCT1 >= "A" .AND. SLCT1 <= "I") .AND.;
         (SLCT2 >= "L" .AND. SLCT2 <= "N")
         USE B:QUAL
         COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2 =;
         "&DESC2"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE A:PERS
         JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
         NAME,SSN,&ATRI1,&ATRI2
         USE SLCTDATA
         DISPLAY FOR &ATRI1 = "&DESC1" OFF FIELDS;
         NAME,SSN,&ATRI1,&ATRI2
         IF EOF
            @ 23,50 SAY "SEARCH COMPLETE"
         ENDIF
    CASE (SLCT1 = "J" .OR. SLCT1 = "K") .AND.;
         (SLCT2 >= "A" .AND. SLCT2 <= "I")
         USE A:PERS
         COPY TO A:TEMP FIELD NAME,SSN,&ATRI2 FOR &ATRI2 =;
         "&DESC2"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE B:EST
```

```
     JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
     NAME,SSN,&ATRI1,&ATRI2
     USE SLCTDATA
     DISPLAY FOR &ATRI1 = "&DESC1" OFF FIELDS;
     NAME,SSN,&ATRI1,&ATRI2
     IF EOF
       @ 23,50 SAY "SEARCH COMPLETE"
     ENDIF
CASE (SLCT1 = "J" .OR. SLCT1 = "K") .AND.;
     (SLCT2 = "J" .OR. SLCT2 = "K")
     USE B:EST
     COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI2 FOR &ATRI2;
     = "&DESC2" .AND.  &ATRI1 = "&DESC1"
     SELECT PRIMARY
     USE A:TEMP
     SELECT SECONDARY
     USE A:PERS
     JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
     NAME,SSN,&ATRI1,&ATRI2
     USE SLCTDATA
     DISPLAY ALL
     IF EOF
       @ 23,50 SAY "SEARCH COMPLETE"
     ENDIF
CASE (SLCT1 = "J" .OR. SLCT1 = "K") .AND.;
     (SLCT2 >= "I" .AND. SLCT2 <= "N")
     USE B:QUAL
     COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2 =;
     "&DESC2"
     USE B:EST
     COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR &ATRI1 =;
     "DESC1"
     SELECT PRIMARY
     USE A:TEMP
     SELECT SECONDARY
     USE A:TEMP2
     JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
     SSN,&ATRI1,&ATRI2
     SELECT PRIMARY
     USE A:TEMP3
     SELECT SECONDARY
     USE A:PERS
     JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
     NAME,SSN,&ATRI1,&ATRI2
     USE SLCTDATA
     DISPLAY ALL
     IF EOF
       @ 23,50 SAY "SEARCH COMPLETE"
     ENDIF
CASE (SLCT1 >= "I" .AND. SLCT1 <= "N") .AND.;
     (SLCT2 >= "A" .AND. SLCT2 <= "I")
     USE A:PERS
     COPY TO A:TEMP FIELD NAME,SSN,&ATRI2 FOR &ATRI2 =;
     "&DESC2"
     SELECT PRIMARY
     USE A:TEMP
     SELECT SECONDARY
     USE B:QUAL
     JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
     NAME,SSN,&ATRI1,&ATRI2
     USE SLCTDATA
     DISPLAY FOR &ATRI1 = "&DESC1" OFF FIELDS;
     NAME,SSN,&ATRI1,&ATRI2
     IF EOF
       @ 23,50 SAY "SEARCH COMPLETE"
     ENDIF
CASE (SLCT1 >= "I" .AND. SLCT1 <= "N") .AND.;
     (SLCT2 = "J" .OR. SLCT2 = "K")
     USE B:EST
```

```
         COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2 =;
         "&DESC2"
         USE B:QUAL
         COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR &ATRI1 =;
         "DESC1"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE A:TEMP2
         JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
         SSN,&ATRI1,&ATRI2
         SELECT PRIMARY
         USE A:TEMP3
         SELECT SECONDARY
         USE A:PERS
         JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
         NAME,SSN,&ATRI1,&ATRI2
         USE SLCTDATA
         DISPLAY ALL
         IF EOF
           @ 23,50 SAY "SEARCH COMPLETE"
         ENDIF
    CASE (SLCT1 >= "I" .AND. SLCT1 <= "N") .AND.;
         (SLCT2 >= "L" .AND. SLCT2 <= "N")
         USE B:QUAL
         COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI2 FOR &ATRI1;
         = "&DESC1" .AND. &ATRI2 = "&DESC2"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE A:PERS
         JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
         NAME,SSN,&ATRI1,&ATRI2
         USE SLCTDATA
         DISPLAY ALL
         IF EOF
           @ 23,50 SAY "SEARCH COMPLETE"
         ENDIF
  ENDCASE
  ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
ENDIF

IF COUNT = 3
  DO CASE
     CASE (SLCT1 >= "A" .AND. SLCT1 <= "I")
       DO CASE
         CASE (SLCT2 >= "A" .AND. SLCT2 <= "I")
           DO CASE
              CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
                 USE A:PERS
                 COPY TO A:TEMP FIELD NAME, SSN, &ATRI1,;
                 &ATRI2, &ATRI3 FOR &ATRI1="&DESC1"
                 USE A:TEMP
                 COPY TO A:TEMP2 FIELD NAME, SSN, &ATRI1,;
                 &ATRI2, &ATRI3 FOR &ATRI2="&DESC2"
                 USE A:TEMP2
                 DISPLAY FOR &ATRI3="&DESC3" OFF FIELDS;
                 NAME, SSN, &ATRI1, &ATRI2, &ATRI3
                 IF EOF
                   @ 23,50 SAY "SEARCH COMPLETE"
                 ENDIF
              CASE (SLCT3 = "J" .OR. SLCT3 = "K")
                 USE B:EST
                 COPY TO A:TEMP FIELD SSN,&ATRI3 FOR &ATRI3;
                 = "&DESC3"
                 SELECT PRIMARY
                 USE A:TEMP
                 SELECT SECONDARY
                 USE A:PERS
```

```
        JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
        NAME,SSN,&ATRI1, &ATRI2,&ATRI3
        USE SLCTDATA
        DISPLAY FOR &ATRI1 = "&DESC1" .AND. &ATRI2;
        = "&DESC2" OFF FIELDS NAME, SSN, &ATRI1,;
        &ATRI2, &ATRI3
        IF EOF
          @ 23,50 SAY "SEARCH COMPLETE"
        ENDIF
      CASE (SLCT3 >= "I" .AND. SLCT3 <= "N")
        USE B:QUAL
        COPY TO A:TEMP FIELD SSN,&ATRI3 FOR &ATRI3;
        = "&DESC3"
        SELECT PRIMARY
        USE A:TEMP
        SELECT SECONDARY
        USE A:PERS
        JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
        NAME, SSN, &ATRI1, &ATRI2, &ATRI3
        USE SLCTDATA
        DISPLAY FOR &ATRI1 = "&DESC1" .AND. &ATRI2;
        = "&DESC2" OFF FIELDS NAME, SSN, &ATRI1,;
        &ATRI2, &ATRI3
        IF EOF
          @ 23,50 SAY "SEARCH COMPLETE"
        ENDIF
    ENDCASE
CASE (SLCT2 >= "L" .AND. SLCT2 <= "N")
    DO CASE
      CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
        USE B:QUAL
        COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2;
        = "&DESC2"
        SELECT PRIMARY
        USE A:TEMP
        SELECT SECONDARY
        USE A:PERS
        JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
        NAME, SSN, &ATRI1, &ATRI2, &ATRI3
        USE SLCTDATA
        DISPLAY FOR &ATRI1 = "&DESC1" .AND. &ATRI3;
        = "&DESC3" OFF FIELDS NAME, SSN, &ATRI1,;
        &ATRI2, &ATRI3
        IF EOF
          @ 23,50 SAY "SEARCH COMPLETE"
        ENDIF
      CASE (SLCT3 >= "I" .AND. SLCT3 <= "N")
        USE A:PERS
        COPY TO A:TEMP FIELD NAME,SSN,&ATRI1 FOR;
        &ATRI1 = "&DESC1"
        SELECT PRIMARY
        USE A:TEMP
        SELECT SECONDARY
        USE B:QUAL
        JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
        NAME, SSN, &ATRI1, &ATRI2, &ATRI3
        USE SLCTDATA
        DISPLAY FOR &ATRI2 = "&DESC2" .AND. &ATRI3;
        = "&DESC3" OFF FIELDS NAME, SSN, &ATRI1,;
        &ATRI2, &ATRI3
        IF EOF
          @ 23,50 SAY "SEARCH COMPLETE"
        ENDIF
      CASE (SLCT3 = "J" .OR. SLCT3 = "K")
        USE A:PERS
        COPY TO A:TEMP FIELD NAME,SSN,&ATRI1 FOR;
        &ATRI1 = "&DESC1"
        SELECT PRIMARY
        USE A:TEMP
```

```
       SELECT SECONDARY
       USE B:QUAL
       JOIN TO A:TEMP2 FOR P.SSN=S.SSN FIELDS;
       NAME, SSN, &ATRI1, &ATRI2
       SELECT PRIMARY
       USE A:TEMP2
       SELECT SECONDARY
       USE B:EST
       JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
       NAME, SSN, &ATRI1, &ATRI2,&ATRI3
       USE SLCTDATA
       DISPLAY FOR &ATRI2 = "&DESC2" .AND. &ATRI3;
       = "&DESC3" OFF FIELDS NAME, SSN, &ATRI1,;
       &ATRI2, &ATRI3
       IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
    ENDCASE
CASE (SLCT2 = "J" .OR. SLCT2 = "K")
 DO CASE
     CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
       USE B:EST
       COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2;
       = "&DESC2"
       SELECT PRIMARY
       USE A:TEMP
       SELECT SECONDARY
       USE A:PERS
       JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
       NAME, SSN, &ATRI1, &ATRI2, &ATRI3
       USE SLCTDATA
       DISPLAY FOR &ATRI1 = "&DESC1" .AND. &ATRI3;
       = "&DESC3" OFF FIELDS NAME, SSN, &ATRI1,;
       &ATRI2, &ATRI3
       IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
     CASE (SLCT3 >= "L" .AND. SLCT3 <= "N")
       USE A:PERS
       COPY TO A:TEMP FIELD NAME,SSN,&ATRI1 FOR;
       &ATRI1 = "&DESC1"
       USE B:EST
       COPY TO A:TEMP2 FIELD SSN,&ATRI2 FOR;
       &ATRI2 = "&DESC2"
       SELECT PRIMARY
       USE A:TEMP
       SELECT SECONDARY
       USE A:TEMP2
       JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
       NAME, SSN, &ATRI1, &ATRI2,&ATRI3
       SELECT PRIMARY
       USE A:TEMP3
       SELECT SECONDARY
       USE B:QUAL
       JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
       NAME, SSN, &ATRI1, &ATRI2, &ATRI3
       USE SLCTDATA
       DISPLAY FOR &ATRI3 = "&DESC3" OFF FIELDS;
       NAME, SSN, &ATRI1, &ATRI2, &ATRI3
       IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
     CASE (SLCT3 = "J" .OR. SLCT3 = "K")
       USE A:PERS
       COPY TO A:TEMP FIELD NAME,SSN,&ATRI1 FOR;
       &ATRI1 = "&DESC1"
       SELECT PRIMARY
       USE A:TEMP
       SELECT SECONDARY
```

```
                USE B:EST
                JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
                NAME, SSN, &ATRI1, &ATRI2, &ATRI3
                USE SLCTDATA
                DISPLAY FOR &ATRI2 = "&DESC2" .AND. &ATRI3;
                = "&DESC3" OFF FIELDS NAME, SSN, &ATRI1,;
                &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
            ENDCASE
        ENDCASE
**BEGIN QUAL / * / *
     CASE (SLCT1 >= "I" .AND. SLCT1 <= "N")
   **BEGIN QUAL / PERS / *
        DO CASE
          CASE (SLCT2 >= "A" .AND. SLCT2 <= "I")
            DO CASE
              CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
                USE A:PERS
                COPY TO A:TEMP FIELD NAME, SSN, &ATRI2,;
                &ATRI3 FOR &ATRI2="&DESC2" .AND.;
                &ATRI3="&DESC3"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE B:QUAL
                JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
                NAME, SSN, &ATRI1, &ATRI2, &ATRI3
                USE SLCTDATA
                DISPLAY FOR &ATRI1="&DESC1" OFF FIELDS;
                NAME, SSN, &ATRI1, &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
              CASE (SLCT3 = "J" .OR. SLCT3 = "K")
                USE B:EST
                COPY TO A:TEMP FIELD SSN,&ATRI3 FOR &ATRI3;
                = "&DESC3"
                USE B:QUAL
                COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR;
                &ATRI1="&DESC1"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:TEMP2
                JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
                SSN, &ATRI1, &ATRI3
                SELECT PRIMARY
                USE A:TEMP3
                SELECT SECONDARY
                USE A:PERS
                JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
                NAME, SSN, &ATRI1, &ATRI2, &ATRI3
                USE SLCTDATA
                DISPLAY FOR &ATRI2 = "&DESC2";
                OFF FIELDS NAME,SSN,&ATRI1,&ATRI2,&ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
              CASE (SLCT3 >= "L" .AND. SLCT3 <= "N")
                USE B:QUAL
                COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI3;
                FOR &ATRI3 = "&DESC3" .AND. &ATRI1 =;
                "&DESC1"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:PERS
```

```
         JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
         NAME, SSN, &ATRI1, &ATRI2, &ATRI3
         USE SLCTDATA
         DISPLAY FOR &ATRI2 = "&DESC2";
         OFF FIELDS NAME,SSN,&ATRI1,&ATRI2,&ATRI3
         IF EOF
           @ 23,50 SAY "SEARCH COMPLETE"
         ENDIF
    ENDCASE
CASE (SLCT2 >= "L" .AND. SLCT2 <= "N")
     DO CASE
       CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
         USE B:QUAL
         COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI2;
         FOR &ATRI1 = "&DESC1" .AND. &ATRI2 =;
         "&DESC2"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE A:PERS
         JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
         NAME, SSN, &ATRI1, &ATRI2, &ATRI3
         USE SLCTDATA
         DISPLAY FOR &ATRI3 = "&DESC3";
         OFF FIELDS NAME,SSN,&ATRI1,&ATRI2,&ATRI3
         IF EOF
           @ 23,50 SAY "SEARCH COMPLETE"
         ENDIF
       CASE (SLCT3 >= "I" .AND. SLCT3 <= "N")
         USE B:QUAL
         COPY TO A:TEMP FIELD SSN, &ATRI1, &ATRI2,;
         &ATRI3 FOR &ATRI1 = "&DESC1" .AND. &ATRI2;
         = "&DESC2" .AND.  &ATRI3 = "&DESC3"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE A:PERS
         JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
         NAME, SSN, &ATRI1, &ATRI2, &ATRI3
         USE SLCTDATA
         DISPLAY ALL OFF FIELDS NAME,SSN,;
         &ATRI1,&ATRI2,&ATRI3
         IF EOF
           @ 23,50 SAY "SEARCH COMPLETE"
         ENDIF
       CASE (SLCT3 = "J" .OR. SLCT3 = "K")
         USE B:QUAL
         COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI2;
         FOR &ATRI1 = "&DESC1" .AND. &ATRI2 =;
         "&DESC2"
         USE B:EST
         COPY TO A:TEMP2 FIELD SSN,&ATRI3 FOR;
         &ATRI3 = "&DESC3"
         SELECT PRIMARY
         USE A:TEMP
         SELECT SECONDARY
         USE A:TEMP2
         JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
         SSN, &ATRI1, &ATRI2, &ATRI3
         SELECT PRIMARY
         USE A:TEMP3
         SELECT SECONDARY
         USE A:PERS
         DISPLAY FOR P.SSN=S.SSN OFF FIELDS NAME,;
         SSN, &ATRI1, &ATRI2, &ATRI3
         IF EOF
           @ 23,50 SAY "SEARCH COMPLETE"
         ENDIF
      ENDCASE
```

```
CASE (SLCT2 = "J" .OR. SLCT2 = "K")
  DO CASE
    CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
      USE B:EST
      COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2;
      = "&DESC2"
      USE B:QUAL
      COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR;
      &ATRI1 = "&DESC1"
      SELECT PRIMARY
      USE A:TEMP
      SELECT SECONDARY
      USE A:TEMP2
      JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
      SSN,&ATRI1,&ATRI2
      SELECT PRIMARY
      USE A:TEMP3
      SELECT SECONDARY
      USE A:PERS
      DISPLAY FOR S.&ATRI3="&DESC3" .AND.;
      P.SSN=S.SSN OFF FIELDS NAME, SSN, &ATRI1,;
      &ATRI2, &ATRI3
      IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
      ENDIF
    CASE (SLCT3 >= "I" .AND. SLCT3 <= "N")
      USE B:QUAL
      COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI3;
      FOR &ATRI1 = "&DESC1" .AND. &ATRI3 =;
      "&DESC3"
      USE B:EST
      COPY TO A:TEMP2 FIELD SSN,&ATRI2 FOR;
      &ATRI2 = "&DESC2"
      SELECT PRIMARY
      USE A:TEMP
      SELECT SECONDARY
      USE A:TEMP2
      JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
      SSN, &ATRI1, &ATRI2, &ATRI3
      SELECT PRIMARY
      USE A:TEMP3
      SELECT SECONDARY
      USE A:PERS
      DISPLAY FOR P.SSN=S.SSN OFF FIELDS NAME,;
      SSN, &ATRI1, &ATRI2, &ATRI3
      IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
      ENDIF
    CASE (SLCT3 = "J" .OR. SLCT3 = "K")
      USE B:EST
      COPY TO A:TEMP FIELD SSN,&ATRI2,&ATRI3;
      FOR &ATRI2 ="&DESC2" .AND. &ATRI3 ="&DESC3"
      USE B:QUAL
      COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR;
      &ATRI1="&DESC1"
      SELECT PRIMARY
      USE A:TEMP
      SELECT SECONDARY
      USE A:TEMP2
      JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
      SSN, &ATRI1, &ATRI2, &ATRI3
      SELECT PRIMARY
      USE A:TEMP3
      SELECT SECONDARY
      USE A:PERS
      DISPLAY FOR P.SSN=S.SSN;
      OFF FIELDS NAME,SSN,&ATRI1,&ATRI2,&ATRI3
      IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
```

```
                ENDIF
          ENDCASE
        ENDCASE
** BEGIN EST / * / *
     CASE (SLCT1 = "J" .OR. SLCT1 = "K")
      **BEGIN EST / PERS / *
        DO CASE
          CASE (SLCT2 >= "A" .AND. SLCT2 <= "I")
            DO CASE
              CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
                USE A:PERS
                COPY TO A:TEMP FIELD NAME, SSN, &ATRI2,;
                &ATRI3 FOR &ATRI2 = "&DESC2" .AND. &ATRI3;
                = "&DESC3"
                USE B:EST
                COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR;
                &ATRI1="&DESC1"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:TEMP2
                DISPLAY FOR P.SSN=S.SSN OFF FIELDS NAME,;
                SSN, &ATRI1, &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
              CASE (SLCT3 = "J" .OR. SLCT3 = "K")
                USE B:EST
                COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI3;
                FOR &ATRI1="&DESC1" .AND. &ATRI3="&DESC3"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:PERS
                DISPLAY FOR P.SSN=S.SSN .AND. S.&ATRI2 =;
                "&DESC2" OFF FIELDS NAME, SSN, &ATRI1,;
                &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
              CASE (SLCT3 >= "L" .AND. SLCT3 <= "N")
                USE B:QUAL
                COPY TO A:TEMP FIELD SSN,&ATRI3 FOR &ATRI3;
                = "&DESC3"
                USE B:EST
                COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR;
                &ATRI1="&DESC1"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:TEMP2
                JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
                SSN, &ATRI1, &ATRI3
                SELECT PRIMARY
                USE SLCTDATA
                SELECT SECONDARY
                USE A:PERS
                DISPLAY FOR P.SSN=S.SSN .AND. &ATRI2 =;
                "&DESC2" OFF FIELDS NAME, SSN, &ATRI1,;
                &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
           ENDCASE
       CASE (SLCT2 >= "L" .AND. SLCT2 <= "N")
            DO CASE
              CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
                USE B:QUAL
                COPY TO A:TEMP FIELD SSN,&ATRI2 FOR &ATRI2;
```

```
       = "&DESC2"
       USE B:EST
       COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR;
       &ATRI1="&DESC1"
       SELECT PRIMARY
       USE A:TEMP
       SELECT SECONDARY
       USE A:TEMP2
       JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
       SSN, &ATRI1, &ATRI2
       SELECT PRIMARY
       USE SLCTDATA
       SELECT SECONDARY
       USE A:PERS
       DISPLAY FOR &ATRI3 = "&DESC3" .AND.;
       P.SSN=S.SSN OFF FIELDS NAME, SSN, &ATRI1,;
       &ATRI2, &ATRI3
       IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
     CASE (SLCT3 >= "L" .AND. SLCT3 <= "N")
       USE B:QUAL
       COPY TO A:TEMP FIELD SSN,&ATRI2,&ATRI3;
       FOR &ATRI2="&DESC2" .AND. &ATRI3="&DESC3"
       USE B:EST
       COPY TO A:TEMP2 FIELD SSN,&ATRI1 FOR;
       &ATRI1="&DESC1"
       SELECT PRIMARY
       USE A:TEMP
       SELECT SECONDARY
       USE A:TEMP2
       JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
       SSN, &ATRI1, &ATRI2, &ATRI3
       SELECT PRIMARY
       USE SLCTDATA
       SELECT SECONDARY
       USE A:PERS
       DISPLAY FOR P.SSN=S.SSN OFF FIELDS NAME,;
       SSN, &ATRI1, &ATRI2, &ATRI3
       IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
     CASE (SLCT3 = "J" .OR. SLCT3 = "K")
       USE B:EST
       COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI3;
       FOR &ATRI1="&DESC1" .AND. &ATRI3="&DESC3"
       USE B:QUAL
       COPY TO A:TEMP2 FIELD SSN,&ATRI2 FOR;
       &ATRI2="&DESC2"
       SELECT PRIMARY
       USE A:TEMP
       SELECT SECONDARY
       USE A:TEMP2
       JOIN TO A:TEMP3 FOR P.SSN=S.SSN FIELDS;
       SSN, &ATRI1, &ATRI2, &ATRI3
       SELECT PRIMARY
       USE A:TEMP3
       SELECT SECONDARY
       USE A:PERS
       DISPLAY FOR P.SSN=S.SSN OFF FIELDS NAME,;
       SSN, &ATRI1, &ATRI2, &ATRI3
       IF EOF
        @ 23,50 SAY "SEARCH COMPLETE"
       ENDIF
    ENDCASE
CASE (SLCT2 = "J" .OR. SLCT2 = "K")
  DO CASE
     CASE (SLCT3 >= "A" .AND. SLCT3 <= "I")
       USE B:EST
```

```
                COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI2 ;
                FOR &ATRI1="&DESC1" .AND. &ATRI2="&DESC2"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:PERS
                DISPLAY FOR P.SSN=S.SSN .AND. &ATRI3 =;
                "&DESC3" OFF FIELDS NAME, SSN, &ATRI1,;
                &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
              CASE (SLCT3 >= "L" .AND. SLCT3 <= "N")
                USE B:EST
                COPY TO A:TEMP FIELD SSN,&ATRI1,&ATRI2;
                FOR &ATRI1="&DESC1" .AND. &ATRI2="&DESC2"
                USE B:QUAL
                COPY TO A:TEMP2 FIELD SSN,&ATRI3 FOR;
                &ATRI3 = "&DESC3"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:TEMP2
                JOIN TO SLCTDATA FOR P.SSN=S.SSN FIELDS;
                SSN, &ATRI1, &ATRI2, &ATRI3
                SELECT PRIMARY
                USE SLCTDATA
                SELECT SECONDARY
                USE A:PERS
                DISPLAY FOR P.SSN=S.SSN OFF FIELDS NAME,;
                SSN, &ATRI1, &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
              CASE (SLCT3 = "J" .OR. SLCT3 = "K")
                USE A:EST
                COPY TO A:TEMP FIELD SSN, &ATRI1, &ATRI2,;
                &ATRI3 FOR &ATRI1 = "&DESC1" .AND. &ATRI2;
                = "&DESC2" .AND. &ATRI3 = "&DESC3"
                SELECT PRIMARY
                USE A:TEMP
                SELECT SECONDARY
                USE A:PERS
                DISPLAY FOR P.SSN=S.SSN OFF FIELDS NAME,;
                SSN, &ATRI1, &ATRI2, &ATRI3
                IF EOF
                  @ 23,50 SAY "SEARCH COMPLETE"
                ENDIF
             ENDCASE
        ENDCASE
  ENDCASE
  ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
ENDIF
USE
RELEASE ALL LIKE M???????
RELEASE REPEAT,COUNT,
RELEASE ALL LIKE ATRI????
RELEASE ALL LIKE SLCT????
RELEASE ALL LIKE DESC????
SET CONSOLE OFF
DELETE FILE A:TEMP
DELETE FILE A:TEMP2
DELETE FILE A:TEMP3
SET CONSOLE ON
RETURN
```

E. NONSTANDARD HELP ROUTINE

```
* ROUTINE NAME: NOSTDHLP.PRG
* MODULE NAME: NONSTANDARD REPORT GENERATOR
* VERSION: 4.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 10FEB84
* VARIABLES USED: NONE
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: PROCEED
* VARIABLES RELEASED:NONE
* FILES OPENED/CLOSED:NONE
* TEMP FILES CREATED:NONE
* USING SUBROUTINES:NOSTDRPT.PRG (4.0)
* DESCRIPTION: THIS ROUTINE SUPPLIES RESPONSE TO THE USER'S
* REQUEST FOR "HELP" WHILE IN THE NONSTANDARD REPORT MENU.
*
ERASE
@ 0,25 SAY "NONSTANDARD COMMAND GENERATOR"
@ 2,0  SAY "LOCATE ALL MARINES THAT SATISFY THE FOLLOWING;
CONDITION:"
@ 4,0  SAY "     <ATTRIBUTE>                <DESCRIPTOR>"
@ 4,0  SAY "                                            "
@ 5,0  SAY "     -----------                ------------"
@ 6,0  SAY "                                            "
@ 7,0  SAY "       RANK            IS               E5  "
@ 9,0  SAY "                                            "
@ 10,0 SAY "--------------------------------------------"
@ 11,0 SAY "     UP TO THREE CONDITION STATEMENTS MAY BE;
JOINED "
@ 12,0 SAY "                  FOR EXAMPLE               "
@ 13,0 SAY "LOCATE ALL MARINES THAT SATISFY THE FOLLOWING;
CONDITIONS "
@ 14,0  SAY "     <ATTRIBUTE>               <DESCRIPTOR>"
@ 15,0  SAY "     -----------               ------------"
@ 16,0 SAY "       RANK            IS               E5  "
@ 17,0 SAY "                    AND                     "
@ 18,0 SAY "       COMPANY         IS             A CO "
@ 19,0 SAY "                    AND                     "
@ 20,0 SAY "       PRIMARY MOS     IS            0331  "
@ 21,0 SAY "JOINING THESE THREE CONDITION STATEMENTS GIVE;
YOU THE NAME "
@ 22,0 SAY "AND SSN OF ALL E5'S IN A CO. THAT HAVE A 0331;
PRIMARY MOS  "
@ 22,0
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
RETURN
```

C. SELECT ATTRIBUTE ROUTINE

```
* ROUTINE NAME: SLCTATRI.PRG
* MODULE NAME: NONSTANDARD REPORT GENERATOR
* VERSION: 4.2.0
* AUTHOR: R.E. PRUIETT
* DATE: 12FEB84
* VARIABLES USED: COUNT, SLCT1, SLCT2, SLCT3
* VARIABLES MODIFIED:NONE
* VARIABLES CREATED: REPEAT, MATRIBUT, MATRI1, ATRI1,
* MATRI2, ATRI2, MATRI3, ATRI3
* VARIABLES RELEASED: NONE
* FILES OPENED/CLOSED:NONE
* TEMP FILES CREATED:NONE
* USING SUBROUTINES:NCSTDRPT.PRG (4.0)
* DESCRIPTION: THIS ROUTINE PROMPTS THE USER TO SELECT
* ATTRIBUTES.  AFTER THE FIRST AND SECOND SELECTION THE
* USER IS ASKED IF HE WANTS TO SELECT ANOTHER ATTRIBUTE.
* IF THE RESPONSE IS YES, THE SELECTION PROCEDURE IS
* REPEATED.  THIS PROCESS IS CONTINUED UNTIL THE USER
* ANSWERS NO OR THREE ATTRIBUTES HAVE BEEN SELECTED.  THE
* ROUTINE WILL AUTOMATICALLY SORT AND LOCATE THE
* APPROPRIATE DATABASE FILES AND DISPLAY THE NAME, SSN AND
* ATTRIBUTE INFORMATION FOR EACH RECORD THAT SATISFIES THE
* USER SPECIFIED CRITERIA.
*
STORE T TO REPEAT
DO WHILE REPEAT = T
STORE F TO REPEAT
ERASE
IF COUNT = 2 .OR. COUNT = 3
DO CASE
  CASE SLCT1 = "A"
    @ 1,1 SAY "*"
  CASE SLCT1 = "B"
    @ 2,1 SAY "*"
  CASE SLCT1 = "C"
    @ 3,1 SAY "*"
  CASE SLCT1 = "D"
    @ 4,1 SAY "*"
  CASE SLCT1 = "E"
    @ 5,1 SAY "*"
  CASE SLCT1 = "F"
    @ 6,1 SAY "*"
  CASE SLCT1 = "G"
    @ 7,1 SAY "*"
  CASE SLCT1 = "H"
    @ 8,1 SAY "*"
  CASE SLCT1 = "I"
    @ 9,1 SAY "*"
  CASE SLCT1 = "J"
    @ 10,1 SAY "*"
  CASE SLCT1 = "K"
    @ 11,1 SAY "*"
  CASE SLCT1 = "L"
    @ 12,1 SAY "*"
  CASE SLCT1 = "M"
    @ 13,1 SAY "*"
  CASE SLCT1 = "N"
    @ 14,1 SAY "*"
ENDCASE
ENDIF
IF COUNT = 3
DO CASE
  CASE SLCT2 = "A"
    @ 1,1 SAY "*"
  CASE SLCT2 = "B"
    @ 2,1 SAY "*"
```

```
  CASE SLCT2 = "C"
    @ 3,1 SAY "*"
  CASE SLCT2 = "D"
    @ 4,1 SAY "*"
  CASE SLCT2 = "E"
    @ 5,1 SAY "*"
  CASE SLCT2 = "F"
    @ 6,1 SAY "*"
  CASE SLCT2 = "G"
    @ 7,1 SAY "*"
  CASE SLCT2 = "H"
    @ 8,1 SAY "*"
  CASE SLCT2 = "I"
    @ 9,1 SAY "*"
  CASE SLCT2 = "J"
    @ 10,1 SAY "*"
  CASE SLCT2 = "K"
    @ 11,1 SAY "*"
  CASE SLCT2 = "L"
    @ 12,1 SAY "*"
  CASE SLCT2 = "M"
    @ 13,1 SAY "*"
  CASE SLCT2 = "N"
    @ 14,1 SAY "*"
ENDCASE
ENDIF
@ 0,29 SAY "SELECT ATTRIBUTE"
@ 1,2  SAY "A...RANK"
@ 2,2  SAY "B...PRIMARY MOS "
@ 3,2  SAY "C...SECONDARY MOS"
@ 4,2  SAY "D...COMPANY"
@ 5,2  SAY "E...PLATOON"
@ 6,2  SAY "F...JOIN DATE"
@ 7,2  SAY "G...EAS"
@ 8,2  SAY "H...BIRTH DATE"
@ 9,2  SAY "I...WEIGHT CONTROL"
@ 10,2 SAY "J...PFT ONE"
@ 11,2 SAY "K...PFT TWO"
@ 12,2 SAY "L...SWIM QUALIFICATION"
@ 13,2 SAY "M...RIFLE QUALIFICATION"
@ 14,2 SAY "N...PISTOL QUALIFICATION"
@ 22,0
ACCEPT "SELECT ATTRIBUTE ===>" TO MATRIBUT
IF COUNT = 1
  STORE MATRIBUT TO SLCT1
  DO CASE
   CASE !(SLCT1) = "A"
      STORE 'RANK' TO MATRI1
      STORE 'RANK' TO ATRI1
   CASE !(SLCT1) = "B"
      STORE 'PRIMARY MOS' TO MATRI1
      STORE 'PRIMEMOS' TO ATRI1
   CASE !(SLCT1) = "C"
      STORE 'SECONDARY MOS' TO MATRI1
      STORE 'SECMOS' TO ATRI1
   CASE !(SLCT1) = "D"
      STORE 'COMPANY' TO MATRI1
      STORE 'COMPANY' TO ATRI1
   CASE !(SLCT1) = "E"
      STORE 'PLATOON' TO MATRI1
      STORE 'PLATOON' TO ATRI1
   CASE !(SLCT1) = "F"
      STORE 'JOINDATE' TO MATRI1
      STORE 'JOINDATE' TO ATRI1
   CASE !(SLCT1) = "G"
      STORE 'EAS' TO MATRI1
      STORE 'EAS' TO ATRI1
   CASE !(SLCT1) = "H"
      STORE 'BIRTH DATE' TO MATRI1
```

```
      STORE 'BRTHDATE' TO ATRI1
    CASE !(SLCT1) = "I"
      STORE ' WEIGHT CONTROL' TO MATRI1
      STORE 'WTCONT' TO ATRI1
    CASE !(SLCT1) = "J"
      STORE 'PFT ONE' TO MATRI1
      STORE 'PFT1CLSS' TO ATRI1
    CASE !(SLCT1) = "K"
      STORE 'PFT TWO' TO MATRI1
      STORE 'PFT2CLSS' TO ATRI1
    CASE !(SLCT1) = "L"
      STORE 'SWIM QUALIFICATION' TO MATRI1
      STORE 'SWIMQUAL' TO ATRI1
    CASE !(SLCT1) = "M"
      STORE 'RIFLE QUALIFICATION' TO MATRI1
      STORE 'RFLQUAL' TO ATRI1
    CASE !(SLCT1) = "N"
      STORE 'PISTOL QUALIFICATION' TO MATRI1
      STORE 'PSTQUAL' TO ATRI1
    OTHERWISE
      STORE T TO REPEAT
  ENDCASE
ENDIF

IF COUNT = 2
  STORE MATRIBUT TO SLCT2
  DO CASE
    CASE !(SLCT2) = "A"
      STORE 'RANK' TO MATRI2
      STORE 'RANK' TO ATRI2
    CASE !(SLCT2) = "B"
      STORE 'PRIMARY MOS' TO MATRI2
      STORE 'PRIMEMOS' TO ATRI2
    CASE !(SLCT2) = "C"
      STORE 'SECONDARY MOS' TO MATRI2
      STORE 'SECMOS' TO ATRI2
    CASE !(SLCT2) = "D"
      STORE 'COMPANY' TO MATRI2
      STORE 'COMPANY' TO ATRI2
    CASE !(SLCT2) = "E"
      STORE 'PLATOON' TO MATRI2
      STORE 'PLATOON' TO ATRI2
    CASE !(SLCT2) = "F"
      STORE 'JOINDATE' TO MATRI2
      STORE 'JOINDATE' TO ATRI2
    CASE !(SLCT2) = "G"
      STORE 'EAS' TO MATRI2
      STORE 'EAS' TO ATRI2
    CASE !(SLCT2) = "H"
      STORE 'BIRTH DATE' TO MATRI2
      STORE 'BRTHDATE' TO ATRI2
    CASE !(SLCT2) = "I"
      STORE ' WEIGHT CONTROL' TO MATRI2
      STORE 'WTCONT' TO ATRI2
    CASE !(SLCT2) = "J"
      STORE 'PFT ONE' TO MATRI2
      STORE 'PFT1CLSS' TO ATRI2
    CASE !(SLCT2) = "K"
      STORE 'PFT TWO' TO MATRI2
      STORE 'PFT2CLSS' TO ATRI2
    CASE !(SLCT2) = "L"
      STORE 'SWIM QUALIFICATION' TO MATRI2
      STORE 'SWIMQUAL' TO ATRI2
    CASE !(SLCT2) = "M"
      STORE 'RIFLE QUALIFICATION' TO MATRI2
      STORE 'RFLQUAL' TO ATRI2
    CASE !(SLCT2) = "N"
      STORE 'PISTOL QUALIFICATION' TO MATRI2
      STORE 'PSTQUAL' TO ATRI2
```

```
    OTHERWISE
      STORE T TO REPEAT
  ENDCASE
ENDIF

IF COUNT = 3
  STORE MATRIBUT TO SLCT3
  DO CASE
    CASE !(SLCT3) = "A"
      STORE 'RANK' TO MATRI3
      STORE 'RANK' TO ATRI3
    CASE !(SLCT3) = "B"
      STORE 'PRIMARY MOS' TO MATRI3
      STORE 'PRIMEMOS' TO ATRI3
    CASE !(SLCT3) = "C"
      STORE 'SECONDARY MOS' TO MATRI3
      STORE 'SECMOS' TO ATRI3
    CASE !(SLCT3) = "D"
      STORE 'COMPANY' TO MATRI3
      STORE 'COMPANY' TO ATRI3
    CASE !(SLCT3) = "E"
      STORE 'PLATOON' TO MATRI3
      STORE 'PLATOON' TO ATRI3
    CASE !(SLCT3) = "F"
      STORE 'JOINDATE' TO MATRI3
      STORE 'JOINDATE' TO ATRI3
    CASE !(SLCT3) = "G"
      STORE 'EAS' TO MATRI3
      STORE 'EAS' TO ATRI3
    CASE !(SLCT3) = "H"
      STORE 'BIRTH DATE' TO MATRI3
      STORE 'BRTHDATE' TO ATRI3
    CASE !(SLCT3) = "I"
      STORE ' WEIGHT CONTROL' TO MATRI3
      STORE 'WTCONT' TO ATRI3
    CASE !(SLCT3) = "J"
      STORE 'PFT ONE' TO MATRI3
      STORE 'PFT1CLSS' TO ATRI3
    CASE !(SLCT3) = "K"
      STORE 'PFT TWO' TO MATRI3
      STORE 'PFT2CLSS' TO ATRI3
    CASE !(SLCT3) = "L"
      STORE 'SWIM QUALIFICATION' TO MATRI3
      STORE 'SWIMQUAL' TO ATRI3
    CASE !(SLCT3) = "M"
      STORE 'RIFLE QUALIFICATION' TO MATRI3
      STORE 'RFLQUAL' TO ATRI3
    CASE !(SLCT3) = "N"
      STORE 'PISTOL QUALIFICATION' TO MATRI3
      STORE 'PSTQUAL' TO ATRI3
    OTHERWISE
     STORE T TO REPEAT
  ENDCASE
ENDIF
DO SLCTDESC
ENDDO
RETURN
```

D. SELECT DESCRIPTOR ROUTINE

```
* ROUTINE NAME: SLCTDESC.PRG
* MODULE NAME: NONSTANDARD REPORT GENERATOR
* VERSION: 4.2.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 14FEB84
* VARIABLES USED: COUNT,
* VARIABLES MODIFIED: DESC1, DESC2, DESC3
* VARIABLES CREATED: MRANK, MSECMOS, MCOMPANY, MPLATOON,
* MJOINDTE, MEAS, MWTCONTL, MPFTONE, MPFTTWO, MSWMQUAL,
* MRIFQUAL, MPISQUAL, MRANK2, MPRIMOS2, MSECMOS2, MCOMPNY2,
* MPLAT2, MJNDTE2, MEAS2, MBIRDTE2, MWTCNTL2, MPFTONE2,
* MPFTTWO2, MSWMQAL2, MRIFQAL2, MPISQAL2, MRANK3, MPRIMOS3,
* MSECMOS3, MCOMPNY3, MPLAT3, MJNDTE3, MEAS3, MBIRDTE3,
* MWTCNTL3, MPFTONE3, MPFTTWO3, MSWMQAL3, MRIFQAL3,
* MPISQAL3,
* VARIABLES RELEASED: NONE
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: SLCTATRI.PRG (4.2.0)
* DESCRIPTION: THIS ROUTINE PROMPTS THE USER AFTER EACH
* REQUEST FOR A NEW ATTRIBUTE TO SELECT THE DESCRIPTION FOR
* THE CORRESPONDING ATTRIBUTE.  FOR EXAMPLE, IF THE USER
* HAS SELECTED THE ATTRIBUTE COMPANY, THIS ROUTINE WILL ASK
* WHICH COMPANY AND PROVIDES A RANGE/EXAMPLE OF APPROPRIATE
* DESCRIPTIONS (E.G., A CO, B CO, ETC).
ERASE
IF COUNT = 1
DO CASE
   CASE !(SLCT1) = "A"
      STORE '  ' TO MRANK
      @ 8,0  SAY "TYPE IN DESIRED RANK DESCRIPTION";
      "(E1,E5,02,ETC.)"
      @ 8,48 GET MRANK PICTURE 'XX'
      READ
      STORE MRANK TO DESC1
   CASE !(SLCT1) = "B"
      STORE '    ' TO MPRIMOS
      @ 8,0 SAY "TYPE IN DESIRED PRIMARY MOS DESCRIPTION";
      "(0311,0331,ETC.)"
      @ 8,58 GET MPRIMOS PICTURE 'XXXX'
      READ
      STORE MPRIMOS TO DESC1
   CASE !(SLCT1) = "C"
      STORE '    ' TO MSECMOS
      @ 8,0 SAY "TYPE IN DESIRED SECONDARY MOS DESCRIPTION";
      "(0311,0331,ETC.)"
      @ 8,60 GET MSECMOS PICTURE 'XXXX'
      READ
      STORE MSECMOS TO DESC1
   CASE !(SLCT1) = "D"
      STORE '      ' TO MCOMPANY
      @ 8,0 SAY "TYPE IN DESIRED COMPANY DESCRIPTION (A";
      "CO,WPNS CO,H&S CO)"
      @ 8,58 GET MCOMPANY PICTURE 'XXXXXX'
      READ
      STORE MCOMPANY TO DESC1
   CASE !(SLCT1) = "E"
      STORE '         ' TO MPLATOON
      @ 8,0 SAY "TYPE IN DESIRED PLATOON DESCRIPTION (1ST";
      "PLAT,3D PLAT,ETC)"
      @ 8,60 GET MPLATOON PICTURE 'XXXXXXXXX'
      READ
      STORE MPLATOON TO DESC1
   CASE !(SLCT1) = "F"
      STORE '      ' TO MJOINDTE
      @ 8,0 SAY "TYPE IN DESIRED JOIN DATE DESCRIPTION";
```

```
    "(220183,0183,83,ETC.)"
    @ 8,64 GET MJOINDTE PICTURE 'XXXXXX'
    READ
    STORE MJOINDTE TO DESC1
  CASE !(SICT1) = "G"
    STORE '      ' TO MEAS
    @ 8,0 SAY "TYPE IN DESIRED EAS DESCRIPTION";
    "(220183,0183,83,ETC.)"
    @ 8,55 GET MEAS PICTURE 'XXXXXX'
    READ
    STORE MEAS TO DESC1
  CASE !(SICT1) = "H"
    STORE '      ' TO MBIRDATE
    @ 8,0 SAY "TYPE IN DESIRED BIRTH DATE DESCRIPTION";
    "(220183,0183,83,ETC.)"
    @ 8,60 GET MBIRDATE PICTURE 'XXXXXX'
    READ
    STORE MBIRDATE TO DESC1
  CASE !(SICT1) = "I"
    STORE '   ' TO MWTCONTL
    @ 8,0 SAY "TYPE IN DESIRED WEIGHT CONTROL DESCRIPTION";
    "(YES OR NO)"
    @ 8,55 GET MWTCONTL PICTURE 'XXX'
    READ
    STORE MWTCONTL TO DESC1
  CASE !(SICT1) = "J"
    STORE ' ' TO MPFTONE
    @ 8,0 SAY "TYPE IN DESIRED PFT ONE DESCRIPTION";
    "(S,1,2,3,F,*)"
    @ 8,50 GET MPFTONE PICTURE 'X'
    READ
    STORE MPFTONE TO DESC1
  CASE !(SICT1) = "K"
    STORE ' ' TO MPFTTWO
    @ 8,0 SAY "TYPE IN DESIRED PFT TWO DESCRIPTION";
    "(S,1,2,3,F,*)"
    @ 8,50 GET MPFTTWO PICTURE 'X'
    READ
    STORE MPFTTWO TO DESC1
  CASE !(SICT1) = "L"
    STORE '  ' TO MSWMQUAL
    @ 8,0 SAY "TYPE IN DESIRED SWIMMING QUALIFICATION";
    "DESCRIPTION"
    @ 9,0 SAY "(S1,S2,S3,UN,**)"
    @ 9,17 GET MSWMQUAL PICTURE 'XX'
    READ
    STORE MSWMQUAL TO DESC1
  CASE !(SICT1) = "M"
    STORE '  ' TO MRIFQUAL
    @ 8,0 SAY "TYPE IN DESIRED RIFLE QUALIFICATION";
    "DESCRIPTION"
    @ 9,0 SAY "(EX,SS,MM,UN,**)"
    @ 9,18 GET MRIFQUAL PICTURE 'XX'
    READ
    STORE MRIFQUAL TO DESC1
  CASE !(SICT1) = "N"
    STORE '  ' TO MPISQUAL
    @ 8,0 SAY "TYPE IN DESIRED PISTOL QUALIFICATION";
    "DESCRIPTION"
    @ 9,0 SAY "(EX,SS,MM,UN,**)"
    @ 9,18 GET MPISQUAL PICTURE 'XX'
    READ
    STORE MPISQUAL TO DESC1
 ENDCASE
ENDIF
IF COUNT = 2
DO CASE
  CASE !(SICT2) = "A"
    STORE '  ' TO MRANK2
```

```
  @ 8,0  SAY "TYPE IN DESIRED RANK DESCRIPTION;
  (E1,E5,02,ETC.)"
  @ 8,48 GET MRANK2 PICTURE 'XX'
  READ
  STORE MRANK2 TO DESC2
CASE !(SLCT2) = "B"
  STORE '    ' TO MPRIMOS2
  @ 8,0 SAY "TYPE IN DESIRED PRIMARY MOS DESCRIPTION;
  (0311,0331,ETC.)"
  @ 8,58 GET MPRIMOS2 PICTURE 'XXXX'
  READ
  STORE MPRIMOS2 TO DESC2
CASE !(SLCT2) = "C"
  STORE '    ' TO MSECMOS2
  @ 8,0 SAY "TYPE IN DESIRED SECONDARY MOS DESCRIPTION;
  (0311,0331,ETC.)"
  @ 8,60 GET MSECMOS2 PICTURE 'XXXX'
  READ
  STORE MSECMOS2 TO DESC2
CASE !(SLCT2) = "D"
  STORE '      ' TO MCOMPNY2
  @ 8,0 SAY "TYPE IN DESIRED COMPANY DESCRIPTION (A;
  CO,WPNS CO,H&S CO)"
  @ 8,58 GET MCOMPNY2 PICTURE 'XXXXXX'
  READ
  STORE MCOMPNY2 TO DESC2
CASE !(SLCT2) = "E"
  STORE '         ' TO MPLAT2
  @ 8,0 SAY "TYPE IN DESIRED PLATOON DESCRIPTION (1ST;
  PLAT,3D PLAT,ETC)"
  @ 8,60 GET MPLAT2 PICTURE 'XXXXXXXXX'
  READ
  STORE MPLAT2 TO DESC2
CASE !(SLCT2) = "F"
  STORE '      ' TO MJNDTE2
  @ 8,0 SAY "TYPE IN DESIRED JOIN DATE DESCRIPTION;
  (220183,0183,83,ETC.)"
  @ 8,64 GET MJNDTE2 PICTURE 'XXXXXX'
  READ
  STORE MJNDTE2 TO DESC2
CASE !(SLCT2) = "G"
  STORE '      ' TO MEAS2
  @ 8,0 SAY "TYPE IN DESIRED EAS DESCRIPTION;
  (220183,0183,83,ETC.)"
  @ 8,55 GET MEAS2 PICTURE 'XXXXXX'
  READ
  STORE MEAS2 TO DESC2
CASE !(SLCT2) = "H"
  STORE '      ' TO MBIRDTE2
  @ 8,0 SAY "TYPE IN DESIRED BIRTH DATE DESCRIPTION;
  (220183,0183,83,ETC.)"
  @ 8,60 GET MBIRDTE2 PICTURE 'XXXXXX'
  READ
  STORE MBIRDTE2 TO DESC2
CASE !(SLCT2) = "I"
  STORE '   ' TO MWTCNTL2
  @ 8,0 SAY "TYPE IN DESIRED WEIGHT CONTROL DESCRIPTION;
  (YES OR NO)"
  @ 8,55 GET MWTCNTL2 PICTURE 'XXX'
  READ
  STORE MWTCNTL2 TO DESC2
CASE !(SLCT2) = "J"
  STORE ' ' TO MPFTONE2
  @ 8,0 SAY "TYPE IN DESIRED PFT ONE DESCRIPTION;
  (S,1,2,3,F,*)"
  @ 8,50 GET MPFTONE2 PICTURE 'X'
  READ
  STORE MPFTONE2 TO DESC2
CASE !(SLCT2) = "K"
```

```
     STORE ' ' TO MPFTTWO2
     @ 8,0 SAY "TYPE IN DESIRED PFT TWO DESCRIPTION;
     (S,1,2,3,F,*)"
     @ 8,50 GET MPFTTWO2 PICTURE 'X'
     READ
     STORE MPFTTWO2 TO DESC2
   CASE !(SLCT2) = "L"
     STORE '  ' TO MSWMQAL2
     @ 8,0 SAY "TYPE IN DESIRED SWIMMING QUALIFICATION;
     DESCRIPTION"
     @ 9,0 SAY "(S1,S2,S3,UN,**)"
     @ 9,17 GET MSWMQAL2 PICTURE 'XX'
     READ
     STORE MSWMQAL2 TO DESC2
   CASE !(SLCT2) = "M"
     STORE '  ' TO MRIFQAL2
     @ 8,0 SAY "TYPE IN DESIRED RIFLE QUALIFICATION;
     DESCRIPTION"
     @ 9,0 SAY "(EX,SS,MM,UN,**)"
     @ 9,18 GET MRIFQAL2 PICTURE 'XX'
     READ
     STORE MRIFQAL2 TO DESC2
   CASE !(SLCT2) = "N"
     STORE '  ' TO MPISQAL2
     @ 8,0 SAY "TYPE IN DESIRED PISTOL QUALIFICATION;
     DESCRIPTION"
     @ 9,0 SAY "(EX,SS,MM,UN,**)"
     @ 9,18 GET MPISQAL2 PICTURE 'XX'
     READ
     STORE MPISQAL2 TO DESC2
  ENDCASE
ENDIF
IF COUNT = 3
DO CASE
   CASE !(SLCT3) = "A"
     STORE '  ' TO MRANK3
     @ 8,0  SAY "TYPE IN DESIRED RANK DESCRIPTION;
     (E1,E5,02,ETC.)"
     @ 8,48 GET MRANK3 PICTURE 'XX'
     READ
     STORE MRANK3 TO DESC3
   CASE !(SLCT3) = "B"
     STORE '    ' TO MPRIMOS3
     @ 8,0 SAY "TYPE IN DESIRED PRIMARY MOS DESCRIPTION;
     (0311,0331,ETC.)"
     @ 8,58 GET MPRIMOS3 PICTURE 'XXXX'
     READ
     STORE MPRIMOS3 TO DESC3
   CASE !(SLCT3) = "C"
     STORE '    ' TO MSECMOS3
     @ 8,0 SAY "TYPE IN DESIRED SECONDARY MOS DESCRIPTION;
     (0311,0331,ETC.)"
     @ 8,60 GET MSECMOS3 PICTURE 'XXXX'
     READ
     STORE MSECMOS3 TO DESC3
   CASE !(SLCT3) = "D"
     STORE '      ' TO MCOMPNY3
     @ 8,0 SAY "TYPE IN DESIRED COMPANY DESCRIPTION (A;
     CO,WPNS CO,H&S CO)"
     @ 8,58 GET MCOMPNY3 PICTURE 'XXXXXX'
     READ
     STORE MCOMPNY3 TO DESC3
   CASE !(SLCT3) = "E"
     STORE '         ' TO MPLAT3
     @ 8,0 SAY "TYPE IN DESIRED PLATOON DESCRIPTION (1ST;
     PLAT,3D PLAT,ETC)"
     @ 8,60 GET MPLAT3 PICTURE 'XXXXXXXXX'
     READ
     STORE MPLAT3 TO DESC3
```

```
   CASE !(SLCT3) = "F"
     STORE '      ' TO MJNDTE3
     @ 8,0 SAY "TYPE IN DESIRED JOIN DATE DESCRIPTION;
     (220183,0183,83,ETC.)"
     @ 8,64 GET MJNDTE3 PICTURE 'XXXXXX'
     READ
     STORE MJNDTE3 TO DESC3
   CASE !(SLCT3) = "G"
     STORE '    ' TO MEAS3
     @ 8,0 SAY "TYPE IN DESIRED EAS DESCRIPTION;
     (220183,0183,83,ETC.)"
     @ 8,55 GET MEAS3 PICTURE 'XXXXXX'
     READ
     STORE MEAS3 TO DESC3
   CASE !(SLCT3) = "H"
     STORE '      ' TO MBIRDTE3
     @ 8,0 SAY "TYPE IN DESIRED BIRTH DATE DESCRIPTION;
     (220183,0183,83,ETC.)"
     @ 8,60 GET MBIRDTE3 PICTURE 'XXXXXX'
     READ
     STORE MBIRDTE3 TO DESC3
   CASE !(SLCT3) = "I"
     STORE '   ' TO MWTCNTL3
     @ 8,0 SAY "TYPE IN DESIRED WEIGHT CONTROL DESCRIPTION;
     (YES OR NO)"
     @ 8,55 GET MWTCNTL3 PICTURE 'XXX'
     READ
     STORE MWTCNTL3 TO DESC3
   CASE !(SLCT3) = "J"
     STORE ' ' TO MPFTONE3
     @ 8,0 SAY "TYPE IN DESIRED PFT ONE DESCRIPTION;
     (S,1,2,3,F,*)"
     @ 8,50 GET MPFTONE3 PICTURE 'X'
     READ
     STORE MPFTONE3 TO DESC3
   CASE !(SLCT3) = "K"
     STORE ' ' TO MPFTTWO3
     @ 8,0 SAY "TYPE IN DESIRED PFT TWO DESCRIPTION;
     (S,1,2,3,F,*)"
     @ 8,50 GET MPFTTWO3 PICTURE 'X'
     READ
     STORE MPFTTWO3 TO DESC3
   CASE !(SLCT3) = "L"
     STORE '  ' TO MSWMQAL3
     @ 8,0 SAY "TYPE IN DESIRED SWIMMING QUALIFICATION;
     DESCRIPTION"
     @ 9,0 SAY "(S1,S2,S3,UN,**)"
     @ 9,17 GET MSWMQAL3 PICTURE 'XX'
     READ
     STORE MSWMQAL3 TO DESC3
   CASE !(SLCT3) = "M"
     STORE '  ' TO MRIFQAL3
     @ 8,0 SAY "TYPE IN DESIRED RIFLE QUALIFICATION;
     DESCRIPTION"
     @ 9,0 SAY "(EX,SS,MM,UN,**)"
     @ 9,18 GET MRIFQAL3 PICTURE 'XX'
     READ
     STORE MRIFQAL3 TO DESC3
   CASE !(SLCT3) = "N"
     STORE '  ' TO MPISQAL3
     @ 8,0 SAY "TYPE IN DESIRED PISTOL QUALIFICATION;
     DESCRIPTION"
     @ 9,0 SAY "(EX,SS,MM,UN,**)"
     @ 9,18 GET MPISQAL3 PICTURE 'XX'
     READ
     STORE MPISQAL3 TO DESC3
  ENDCASE
ENDIF
RETURN
```

APPENDIX G

STANDARD COMMAND GENERATOR MODULE LISTINGS

A. STANDARD REPORT ROUTINE

```
* ROUTINE NAME: STDRPT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.0
* AUTHOR: R.E. PRUIETT
* DATE: 6NOV83
* VARIABLES USED: NONE
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED:  AASTDOPT, AADONE, PROCEED
* VARIABLES RELEASED: AASTDOPT, AADONE, ALL EXCEPT AA?????
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: COMMAND DETERMINER
* DESCRIPTION: GENERATES THE PRIMARY MENU FOR STANDARD
* REPORT SELECTION AND STORES THE USER'S RESPONSE IN
* AASTDOPT.  CONTROL IS THEN PASSED TO THE APPROPRIATE
* SUBROUTINE TO OBTAIN THE NECESSARY DATA FROM THE
* DATABASE.  THIS ROUTINE WILL CONTINUE UNTIL THE USER
* RESPONDS WITH A "Q".

STORE F TO AADONE
DO WHILE .NOT. AADONE
ERASE
*        PRIMARY MENU FOR STANDARD REPORT SELECTION
@ 2,5 SAY "       STANDARD REPORT SELECTION         "
@ 3,5 SAY "SELECT A REPORT BY ENTERING THE APPROPRIATE;
 LETTER "
@ 5,5 SAY "A...UNIT ROSTER                          "
@ 6,5 SAY "B...TRAINING STATUS REPORT               "
@ 7,5 SAY "C...TRAINING ROSTER REPORT               "
@ 8,5 SAY "D...INDIVIDUAL TRAINING RECORD           "
@ 9,5 SAY "E...MARKSMANSHIP STATUS REPORT           "
@ 10,5 SAY"F...MARKSMANSHIP ROSTER REPORT           "
@ 11,5 SAY"G...MOS STATUS REPORT                    "
@ 12,5 SAY"H...MOS ROSTER REPORT                    "
@ 13,5 SAY"I...PERSONAL DATA REPORT                 "
@ 14,5 SAY"J...EST STATUS REPORT                    "
@ 15,5 SAY"K...EST ROSTER REPORT                    "
@ 16,5 SAY"L...SWIM QUALIFICATION REPORT            "
@ 17,5 SAY"M...HELP                                 "
@ 19,5 SAY"Q...QUIT                                 "
@ 20,5 SAY"                                         "
@ 21,5 SAY"                                         "
ACCEPT "SELECT OPTION ======>  " TO AASTDOPT

DO CASE
CASE !(AASTDOPT) = 'A'
   DO SLCTUNIT
   DO UNITROST
   ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
CASE !(AASTDOPT) = 'B'
   DO SLCTUNIT
   DO TRNGSTAT
CASE !(AASTDOPT) = 'C'
   DO SLCTUNIT
   DO TRNGROST
   @ 22,0
```

```
   ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
CASE !(AASTDOPT) = 'D'
   ERASE
   DO VIEWITR
CASE !(AASTDOPT) = 'E'
   DO SLCTUNIT
   DO B:MKSSTAT
CASE !(AASTDOPT) = 'F'
   DO SLCTUNIT
   DO MKSROST
CASE !(AASTDOPT) = 'G'
   DO SLCTUNIT
   DO MOSSTAT
   @ 22,0
   ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
CASE !(AASTDOPT) = 'H'
   DO SLCTUNIT
   DO MOSROST
   @ 22,0
   ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
CASE !(AASTDOPT) = 'I'
   DO SLCTUNIT
   DO PERSDATA
   @ 22,0
   ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
CASE !(AASTDOPT) = 'J'
   DO SLCTUNIT
   DO ESTSTAT
CASE !(AASTDOPT) = 'K'
   DO SLCTUNIT
   DO ESTROST
   @ 22,0
   ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
CASE !(AASTDOPT) = 'L'
   DO SLCTUNIT
   DO SWIMQUAL
CASE !(AASTDOPT) = 'M'
   DO A:HELP
ENDCASE

IF !(AASTDOPT) = 'Q'
    STORE T TO AADONE
ENDIF

ENDDO
RELEASE AADONE,AASTDOPT
RELEASE ALL EXCEPT AA?????
USE
RETURN
```

B. SELECT UNIT ROUTINE

```
* ROUTINE NAME: SLCTUNIT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 6NOV83
* VARIABLES USED: ONECO, TWOCO, THREECO, FOURCO, ONEPLT,
* TWOPLT, THREEPLT,FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: MUNIT, MPLAT
* VARIABLES RELEASED: NONE
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: NONE
* USING ROUTINES: STDRPT.PRG (5.0)
* DESCRIPTION: THIS ROUTINE PROMPTS THE USER TO SELECT
* THE SIZE AND NAME OF THE UNIT (I.E., BATTALION,COMPANY,
* PLATOON) FOR THE REPORT GENERATION.  THE USER RESPONDS
* WITH A LETTER THAT CORRESPONDS TO A USER INSTALLED CO OR
* PLT DESIGNATION.  THIS ROUTINE WILL EXECUTE ONCE EACH
* TIME CALLED.

STORE F TO SLCTDONE
RESTORE FROM A:UNITMEM ADDITIVE

DO WHILE .NOT. SLCTDONE
ERASE
@ 6,5 SAY "SELECT UNIT                                        "
@ 8,5 SAY "A..."
@ 8,9 SAY ONECO
@ 10,5 SAY "B..."
@ 10,9 SAY TWOCO
@ 12,5 SAY "C..."
@ 12,9 SAY THREECO
@ 14,5 SAY "D..."
@ 14,9 SAY FOURCO
@ 16,5 SAY "E...BATTALION                                     "
@ 17,5 SAY "                                                  "
@ 18,5 SAY "                                                  "
ACCEPT "SELECT OPTION ======> " TO MUNIT
IF !(MUNIT)= 'A'.OR. !(MUNIT)='B' .OR. !(MUNIT)='C' .OR.;
!(MUNIT)='D' .OR. !(MUNIT)='E'
      STORE T TO SLCTDONE
ENDIF
ENDDO

STORE F TO SLCTDONE
DO WHILE .NOT. SLCTDONE .AND. !(MUNIT)<>'E'
IF !(MUNIT) = 'A' .OR. !(MUNIT) = 'B' .OR. !(MUNIT) = 'C';
    .OR. !(MUNIT) = 'D'
    ERASE
    @ 10,5 SAY "SELECT SUBUNIT SIZE"
    @ 12,5 SAY "A..."
    @ 12,9 SAY ONEPLT
    @ 14,5 SAY "B..."
    @ 14,9 SAY TWOPLT
    @ 16,5 SAY "C..."
    @ 16,9 SAY THREEPLT
    @ 18,5 SAY "D..."
    @ 18,9 SAY FOURPLT
    @ 20,5 SAY "E...ALL OF UNIT                              "
    @ 21,5 SAY "                                             "
    @ 22,5 SAY "                                             "
    ACCEPT "SELECT OPTION =======>  " TO MPLAT
ENDIF
IF !(MPLAT)='A' .OR. !(MPLAT)='B' .OR. !(MPLAT)='C' .OR.;
!(MPLAT)='D' .OR. !(MPLAT)='E'
  STORE T TO SLCTDONE
```

```
ENDIF
ENDDO
IF !(MUNIT) = 'E'
   STORE 'Z' TO MPLAT
ENDIF
RELEASE SLCTDONE
USE
RETURN
```

C. UNIT ROSTER ROUTINE

```
* ROUTINE NAME: UNITRCST.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.2.0
* AUTHOR: R. E. PRUITT
* DATE: 6NOV83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO, ONEPLT, TWOPLT, THREEPLT, FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: NONE
* VARIABLES RELEASED: MUNIT, MPLAT
* FILES (OPENED/CLOSED): A:PERS INDEX A:ALPHPERS
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: THIS IS A CONTROL ROUTINE WHICH CREATES THE
* PERSONNEL ROSTER FOR THE UNIT SPECIFIED BY THE USER'S
* RESPONSE TO THE SLCTUNIT MENU(5.1.0).

ERASE
USE A:PERS INDEX A:ALPHPERS
DO CASE
   CASE !(MUNIT) = 'E'
       REPORT FORM B:RCSTRPT
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
       REPORT FORM B:RCSTRPT FOR COMPANY = ONECO
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
       REPORT FORM B:RCSTRPT FOR COMPANY = ONECO .AND.;
       PLATOON = ONEPLT
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
       REPORT FORM B:RCSTRPT FOR COMPANY = ONECO .AND.;
       PLATOON = TWOPLT
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
       REPORT FORM B:RCSTRPT FOR COMPANY = ONECO .AND.;
       PLATOON = THREEPLT
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
       REPORT FORM B:RCSTRPT FOR COMPANY = ONECO .AND.;
       PLATOON = FOURPLT
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
       REPORT FORM B:RCSTRPT FOR COMPANY = TWOCO
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
       REPORT FORM B:RCSTRPT FOR COMPANY = TWOCO .AND.;
       PLATOON = ONEPLT
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
       REPORT FORM B:RCSTRPT FOR COMPANY = TWOCO .AND.;
       PLATOON = TWOPLT
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
       REPORT FORM B:RCSTRPT FOR COMPANY = TWOCO .AND.;
       PLATOON = THREEPLT
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
       REPORT FORM B:RCSTRPT FOR COMPANY = TWOCO .AND.;
       PLATOON = FOURPLT
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
       REPORT FORM B:RCSTRPT FOR COMPANY = THREECO
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
       REPORT FORM B:RCSTRPT FOR COMPANY = THREECO .AND.;
       PLATOON = ONEPLT
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
       REPORT FORM B:RCSTRPT FOR COMPANY = THREECO .AND.;
       PLATOON = TWOPLT
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
       REPORT FORM B:RCSTRPT FOR COMPANY = THREECO .AND.;
       PLATOON = THREEPLT
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
       REPORT FORM B:RCSTRPT FOR COMPANY = THREECO .AND.;
       PLATOON = FOURPLT
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
       REPORT FORM B:RCSTRPT FOR COMPANY = FOURCO
```

```
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
      REPORT FORM B:POSTRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = ONEPLT
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
      REPORT FORM B:POSTRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = TWOPLT
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
      REPORT FORM B:POSTRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = THREEPLT
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
      REPORT FORM B:POSTRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = FOURPLT
ENDCASE
USE
RELEASE MUNIT, MPLAT
RETURN
```

D. TRAINING STATISTICS ROUTINE

```
* ROUTINE NAME: TRNGSTAT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.3.0
* AUTHOR: R. E. PRUIETT
* DATE: 22DEC83
* VARIABLES USED: MUNIT, MPLAT, ZZACOC, ZZTOTAL, ZZBCOC,
* ZZCCOC, ZZAHIS, ZZBHIS, ZZCHIS, ZZACOD, ZZBCOD, ZZCCOD,
* ZZAINT, ZZBINT, ZZCINT, ZZAAID, ZZBAID, ZZCAID, ZZDAID,
* ZZEAID, ZZFAID, ZZGAID, ZZHAID, ZZIAID, ZZJAID, ZZKAID,
* PROCEED, ZZAUNI, ZZBUNI, ZZCUNI, ZZANBC, ZZBNBC, ZZCNBC,
* ZZDNBC, ZZENBC, ZZFNBC, ZZAMKS, ZZBMKS, ZZCMKS, ZZDMKS,
* ZZEMKS, ZZFMKS, ZZATAC, ZZBTAC, ZZCTAC, ZZDTAC, ZZETAC,
* ZZPFT1, ZZPFT2, ZZSWIM, ZZRFL, ZZPST, ZZNAPST, ZZNARFL
* VARIABLES MODIFIED: NO GLOBAL VARIABLES MODIFIED
* VARIABLES CREATED: NONE
* VARIABLES RELEASED: ZZ??????
* FILES (OPENED/CLOSED):EST, PERS, QUAL (ALL FILES CLOSED)
* TEMP FILES CREATED: TEMP,
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: FOR THE SELECTED UNIT, THIS ROUTINE
* CALCULATES THE TOTAL NUMBER OF TRAINING ELEMENTS
* COMPLETED FOR EACH TRAINING CATEGORY.  FOR EXAMPLE, THE
* TRAINING CATEGORY "HISTORY" CONSIST OF THREE TRAINING
* ELEMENTS( A, B, C).  A PERCENTAGE COMPLETED FIGURE IS
* CALCULATED FOR EACH TRAINING ELEMENT BY DIVIDING THE
* TOTAL TRAINING ELEMENTS COMPLETED ( EX. ZZAHIS, ZZBHIS,
* ZZCHIS) BY THE TOTAL NUMBER OF PERSONNEL IN THE
* UNIT(ZZTOTAL). BOTH THE ABSOLUTE TOTALS FOR EACH ELEMENT
* AND THE PERCENTAGE COMPLETED FIGURES ARE SHOWN.

ERASE
@ 12,35 SAY "WORKING"
DO CASE
   CASE !(MUNIT) = 'E'
      USE B:EST
      DO CNTTRNG
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.SSN=S.SSN)
      FIELDS COC,HIS,COD,INT,AID,UNI,;
      PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTTRNG
      DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
      ONEPLT .AND. P.SSN=S.SSN) FIELDS;
      COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
      PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTTRNG
      DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
```

```
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
       TWOPLT .AND. P.SSN=S.SSN) FIELDS;
       COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
       PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
       THREEPLT .AND. P.SSN=S.SSN) FIELDS;
       COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
       PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
       FOURPLT .AND. P.SSN=S.SSN) FIELDS;
       COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
       PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND.;
       P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
       AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
       ONEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
       INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
       TWOPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
       INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
```

```
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
      THREEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
      INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTTRNG
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
      FOURPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
      INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTTRNG
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =THREECO .AND.;
      P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTTRNG
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
      = ONEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,;
      COD,INT,AID,UNI,PFT1CLSS, PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTTRNG
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
      = TWOPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
      INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTTRNG
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
      = THREEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
```

```
       INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
       = FOURPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
       INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND.;
       P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
       AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
       = ONEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
       INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
       = TWOPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
       AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
       = THREEPLT .AND. P.SSN=S.SSN) FIELDS;
       COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
       PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTTRNG
       DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
```

```
        USE B:EST
        SELECT PRIMARY
        JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
        = FOURPLT .AND. P.SSN=S.SSN) FIELDS;
        COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
        PFT2CLSS,NBC,MFS,TAC
        USE TEMP
        DO CNTTRNG
        DELETE FILE TEMP
ENDCASE
ERASE
@ 0,25 SAY "TRAINING STATUS REPORT"
@ 2,0 SAY "CODE OF CONDUCT..."
@ 2,25 SAY (ZZACOC/ZZTOTAL)*100 USING '999'
@ 2,30 SAY "PERCENT COMPLETED A..."
@ 2,52 SAY ZZACOC USING '999'
@ 3,25 SAY (ZZBCOC/ZZTOTAL)*100 USING '999'
@ 3,30 SAY "PERCENT COMPLETED B..."
@ 3,52 SAY ZZBCOC USING '999'
@ 4,25 SAY (ZZCCOC/ZZTOTAL)*100 USING '999'
@ 4,30 SAY "PERCENT COMPLETED C..."
@ 4,52 SAY ZZCCOC USING '999'
@ 6,0 SAY "MARINE CORPS HISTORY..."
@ 6,25 SAY (ZZAHIS/ZZTOTAL)*100 USING '999'
@ 6,30 SAY "PERCENT COMPLETED A..."
@ 6,52 SAY ZZAHIS USING '999'
@ 7,25 SAY (ZZBHIS/ZZTOTAL)*100 USING '999'
@ 7,30 SAY "PERCENT COMPLETED B..."
@ 7,52 SAY ZZBHIS USING '999'
@ 8,25 SAY (ZZCHIS/ZZTOTAL)*100 USING '999'
@ 8,30 SAY "PERCENT COMPLETED C..."
@ 8,52 SAY ZZCHIS USING '999'
@ 10,0 SAY "CLOSE ORDER DRILL..."
@ 10,25 SAY (ZZACOD/ZZTOTAL)*100 USING '999'
@ 10,30 SAY "PERCENT COMPLETED A..."
@ 10,52 SAY ZZACOD USING '999'
@ 11,25 SAY (ZZBCOD/ZZTOTAL)*100 USING '999'
@ 11,30 SAY "PERCENT COMPLETED B..."
@ 11,52 SAY ZZBCOD USING '999'
@ 12,25 SAY (ZZCCOD/ZZTOTAL)*100 USING '999'
@ 12,30 SAY "PERCENT COMPLETED C..."
@ 12,52 SAY ZZCCOD USING '999'
@ 14,0 SAY "INTERIOR GUARD..."
@ 14,25 SAY (ZZAINT/ZZTOTAL)*100 USING '999'
@ 14,30 SAY "PERCENT COMPLETED A..."
@ 14,52 SAY ZZAINT USING '999'
@ 15,25 SAY (ZZBINT/ZZTOTAL)*100 USING '999'
@ 15,30 SAY "PERCENT COMPLETED B..."
@ 15,52 SAY ZZBINT USING '999'
@ 16,25 SAY (ZZCINT/ZZTOTAL)*100 USING '999'
@ 16,30 SAY "PERCENT COMPLETED C..."
@ 16,52 SAY ZZCINT USING '999'
@ 18,0 SAY "FIRST AID..."
@ 18,20 SAY (ZZAAID/ZZTOTAL)*100 USING '999'
@ 18,24 SAY "PERCENT COMPLETED A..."
@ 18,46 SAY ZZAAID USING '999'
@ 18,50 SAY (ZZBAID/ZZTOTAL)*100 USING '999'
@ 18,54 SAY "PERCENT COMPLETED B..."
@ 18,76 SAY ZZBAID USING '999'
@ 19,20 SAY (ZZCAID/ZZTOTAL)*100 USING '999'
@ 19,24 SAY "PERCENT COMPLETED C..."
@ 19,46 SAY ZZCAID USING '999'
@ 19,50 SAY (ZZDAID/ZZTOTAL)*100 USING '999'
@ 19,54 SAY "PERCENT COMPLETED D..."
@ 19,76 SAY ZZDAID USING '999'
@ 20,20 SAY (ZZEAID/ZZTOTAL)*100 USING '999'
@ 20,24 SAY "PERCENT COMPLETED E..."
@ 20,46 SAY ZZEAID USING '999'
@ 20,50 SAY (ZZFAID/ZZTOTAL)*100 USING '999'
```

```
@ 20,54 SAY "PERCENT COMPLETED F..."
@ 20,76 SAY ZZFAID USING '999'
@ 21,20 SAY (ZZGAID/ZZTOTAL)*100 USING '999'
@ 21,24 SAY "PERCENT COMPLETED G..."
@ 21,46 SAY ZZGAID USING '999'
@ 21,50 SAY (ZZHAID/ZZTOTAL)*100 USING '999'
@ 21,54 SAY "PERCENT COMPLETED H..."
@ 21,76 SAY ZZHAID USING '999'
@ 22,20 SAY (ZZIAID/ZZTOTAL)*100 USING '999'
@ 22,24 SAY "PERCENT COMPLETED I..."
@ 22,46 SAY ZZIAID USING '999'
@ 22,50 SAY (ZZJAID/ZZTOTAL)*100 USING '999'
@ 22,54 SAY "PERCENT COMPLETED J..."
@ 22,76 SAY ZZJAID USING '999'
@ 23,20 SAY (ZZKAID/ZZTOTAL)*100 USING '999'
@ 23,24 SAY "PERCENT COMPLETED K..."
@ 23,46 SAY ZZKAID USING '999'
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
ERASE
@ 0,25 SAY "TRAINING STATUS REPORT"
@ 2,0 SAY "EQUIPMENT/UNIFORMS..."
@ 2,25 SAY (ZZAUNI/ZZTOTAL)*100 USING '999'
@ 2,30 SAY "PERCENT COMPLETED A..."
@ 2,52 SAY ZZAUNI USING '999'
@ 3,25 SAY (ZZBUNI/ZZTOTAL)*100 USING '999'
@ 3,30 SAY "PERCENT COMPLETED B..."
@ 3,52 SAY ZZBUNI USING '999'
@ 4,25 SAY (ZZCUNI/ZZTOTAL)*100 USING '999'
@ 4,30 SAY "PERCENT COMPLETED C..."
@ 4,52 SAY ZZCUNI USING '999'
@ 6,0 SAY "NBC..."
@ 6,25 SAY (ZZANBC/ZZTOTAL)*100 USING '999'
@ 6,30 SAY "PERCENT COMPLETED A..."
@ 6,52 SAY ZZANBC USING '999'
@ 7,25 SAY (ZZBNBC/ZZTOTAL)*100 USING '999'
@ 7,30 SAY "PERCENT COMPLETED B..."
@ 7,52 SAY ZZBNBC USING '999'
@ 8,25 SAY (ZZCNBC/ZZTOTAL)*100 USING '999'
@ 8,30 SAY "PERCENT COMPLETED C..."
@ 8,52 SAY ZZCNBC USING '999'
@ 9,25 SAY (ZZDNBC/ZZTOTAL)*100 USING '999'
@ 9,30 SAY "PERCENT COMPLETED D..."
@ 9,52 SAY ZZDNBC USING '999'
@ 10,25 SAY (ZZENBC/ZZTOTAL)*100 USING '999'
@ 10,30 SAY "PERCENT COMPLETED E..."
@ 10,52 SAY ZZENBC USING '999'
@ 11,25 SAY (ZZFNBC/ZZTOTAL)*100 USING '999'
@ 11,30 SAY "PERCENT COMPLETED F..."
@ 11,52 SAY ZZFNBC USING '999'
@ 13,0 SAY "MARKSMANSHIP..."
@ 13,25 SAY (ZZAMKS/ZZTOTAL)*100 USING '999'
@ 13,30 SAY "PERCENT COMPLETED A..."
@ 13,52 SAY ZZAMKS USING '999'
@ 14,25 SAY (ZZBMKS/ZZTOTAL)*100 USING '999'
@ 14,30 SAY "PERCENT COMPLETED B..."
@ 14,52 SAY ZZBMKS USING '999'
@ 15,25 SAY (ZZCMKS/ZZTOTAL)*100 USING '999'
@ 15,30 SAY "PERCENT COMPLETED C..."
@ 15,52 SAY ZZCMKS USING '999'
@ 16,25 SAY (ZZDMKS/ZZTOTAL)*100 USING '999'
@ 16,30 SAY "PERCENT COMPLETED D..."
@ 16,52 SAY ZZDMKS USING '999'
@ 17,25 SAY (ZZEMKS/ZZTOTAL)*100 USING '999'
@ 17,30 SAY "PERCENT COMPLETED E..."
@ 17,52 SAY ZZEMKS USING '999'
@ 18,25 SAY (ZZFMKS/ZZTOTAL)*100 USING '999'
@ 18,30 SAY "PERCENT COMPLETED F..."
@ 18,52 SAY ZZFMKS USING '999'
@ 20,0
```

```
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
ERASE
@ 0,25 SAY "TRAINING STATUS REPORT"
@ 2,0 SAY "INDIVID TAC MEASURES..."
@ 2,25 SAY (ZZATAC/ZZTOTAL)*100 USING '999'
@ 2,30 SAY "PERCENT COMPLETED A..."
@ 2,52 SAY ZZATAC USING '999'
@ 3,25 SAY (ZZBTAC/ZZTOTAL)*100 USING '999'
@ 3,30 SAY "PERCENT COMPLETED B..."
@ 3,52 SAY ZZBTAC USING '999'
@ 4,25 SAY (ZZCTAC/ZZTOTAL)*100 USING '999'
@ 4,30 SAY "PERCENT COMPLETED C..."
@ 4,52 SAY ZZCTAC USING '999'
@ 5,25 SAY (ZZDTAC/ZZTOTAL)*100 USING '999'
@ 5,30 SAY "PERCENT COMPLETED D..."
@ 5,52 SAY ZZDTAC USING '999'
@ 6,25 SAY (ZZETAC/ZZTOTAL)*100 USING '999'
@ 6,30 SAY "PERCENT COMPLETED E..."
@ 6,52 SAY ZZETAC USING '999'
@ 8,0 SAY "PFT1..."
@ 8,24 SAY ((ZZTOTAL-ZZPFT1)/ZZTOTAL)*100 USING '999'
@ 8,31 SAY "PERCENT COMPLETED PFT ONE..."
@ 8,62 SAY (ZZTOTAL-ZZPFT1) USING '999'
@ 10,0 SAY "PFT2..."
@ 10,24 SAY ((ZZTOTAL-ZZPFT2)/ZZTOTAL)*100 USING '999'
@ 10,31 SAY "PERCENT COMPLETED PFT TWO..."
@ 10,62 SAY (ZZTOTAL-ZZPFT2) USING '999'
RESTORE FROM ZZTEMP
DO CASE
   CASE !(MUNIT) = 'E'
      USE B:QUAL
      DO CNTQUAL
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND.;
      P.SSN=S.SSN) FIELDS  SSN,SWIMQUAL, RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
      ONEPLT .AND. P.SSN=S.SSN) FIELDS;
      SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
      TWOPLT .AND. P.SSN=S.SSN) FIELDS;
      SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
      SELECT PRIMARY
```

```
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
      THREEPLT .AND. P.SSN=S.SSN) FIELDS;
      SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
      FOURPLT .AND. P.SSN=S.SSN) FIELDS;
      SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND.;
      P.SSN=S.SSN) FIELDS SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
      ONEPLT .AND. P.SSN=S.SSN) FIELDS;
      SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
      TWOPLT .AND. P.SSN=S.SSN) FIELDS;
      SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:QUAL
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
      THREEPLT .AND. P.SSN=S.SSN) FIELDS;
      SSN,SWIMQUAL,RFLQUAL,PSTQUAL
      USE TEMP
      DO CNTQUAL
      DELETE FILE TEMP
```

```
CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
   SELECT PRIMARY
   USE A:PERS
   SELECT SECONDARY
   USE B:QUAL
   SELECT PRIMARY
   JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
   FOURPLT .AND. P.SSN=S.SSN) FIELDS;
   SSN,SWIMQUAL,RFLQUAL,PSTQUAL
   USE TEMP
   DO CNTQUAL
   DELETE FILE TEMP
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
   SELECT PRIMARY
   USE A:PERS
   SELECT SECONDARY
   USE B:QUAL
   SELECT PRIMARY
   JOIN TO TEMP FOR (P.COMPANY =THREECO .AND.;
   P.SSN=S.SSN) FIELDS SSN,SWIMQUAL,RFLQUAL,PSTQUAL
   USE TEMP
   DO CNTQUAL
   DELETE FILE TEMP
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
   SELECT PRIMARY
   USE A:PERS
   SELECT SECONDARY
   USE B:QUAL
   SELECT PRIMARY
   JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
   = ONEPLT .AND. P.SSN=S.SSN) FIELDS;
   SSN,SWIMQUAL,RFLQUAL,PSTQUAL
   USE TEMP
   DO CNTQUAL
   DELETE FILE TEMP
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
   SELECT PRIMARY
   USE A:PERS
   SELECT SECONDARY
   USE B:QUAL
   SELECT PRIMARY
   JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
   = TWOPLT .AND. P.SSN=S.SSN) FIELDS;
   SSN,SWIMQUAL,RFLQUAL,PSTQUAL
   USE TEMP
   DO CNTQUAL
   DELETE FILE TEMP
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
   SELECT PRIMARY
   USE A:PERS
   SELECT SECONDARY
   USE B:QUAL
   SELECT PRIMARY
   JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
   = THREEPLT .AND. P.SSN=S.SSN) FIELDS;
   SSN,SWIMQUAL,RFLQUAL,PSTQUAL
   USE TEMP
   DO CNTQUAL
   DELETE FILE TEMP
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
   SELECT PRIMARY
   USE A:PERS
   SELECT SECONDARY
   USE B:QUAL
   SELECT PRIMARY
   JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
   = FOURPLT .AND. P.SSN=S.SSN) FIELDS;
   SSN,SWIMQUAL,RFLQUAL,PSTQUAL
   USE TEMP
```

```
        DO CNTQUAL
        DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
        SELECT PRIMARY
        USE A:PERS
        SELECT SECONDARY
        USE B:QUAL
        SELECT PRIMARY
        JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND.;
        P.SSN=S.SSN) FIELDS SSN,SWIMQUAL,RFLQUAL,PSTQUAL
        USE TEMP
        DO CNTQUAL
        DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
        SELECT PRIMARY
        USE A:PERS
        SELECT SECONDARY
        USE B:QUAL
        SELECT PRIMARY
        JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
        = ONEPLT .AND. P.SSN=S.SSN) FIELDS;
        SSN,SWIMQUAL,RFLQUAL,PSTQUAL
        USE TEMP
        DO CNTQUAL
        DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
        SELECT PRIMARY
        USE A:PERS
        SELECT SECONDARY
        USE B:QUAL
        SELECT PRIMARY
        JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
        = TWOPLT .AND. P.SSN=S.SSN) FIELDS;
        SSN,SWIMQUAL,RFLQUAL,PSTQUAL
        USE TEMP
        DO CNTQUAL
        DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
        SELECT PRIMARY
        USE A:PERS
        SELECT SECONDARY
        USE B:QUAL
        SELECT PRIMARY
        JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
        = THREEPLT .AND. P.SSN=S.SSN) FIELDS;
        SSN,SWIMQUAL,RFLQUAL,PSTQUAL
        USE TEMP
        DO CNTQUAL
        DELETE FILE TEMP
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
        SELECT PRIMARY
        USE A:PERS
        SELECT SECONDARY
        USE B:QUAL
        SELECT PRIMARY
        JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
        = FOURPLT .AND. P.SSN=S.SSN) FIELDS;
        SSN,SWIMQUAL,RFLQUAL,PSTQUAL
        USE TEMP
        DO CNTQUAL
        DELETE FILE TEMP
ENDCASE
@ 12,0 SAY "SWIMQUAL..."
@ 12,24 SAY ((ZZTOTAL-ZZSWIM)/ZZTOTAL)*100 USING '999'
@ 12,31 SAY "PERCENT SWIM QUALIFIED..."
@ 12,60 SAY (ZZTOTAL-ZZSWIM) USING '999'
@ 14,0 SAY "RIFLE QUAL..."
@ 14,24 SAY ((ZZTOTAL-ZZRFL-ZZNARFL)/ZZTOTAL)*100 USING;
'999'
```

```
@ 14,31 SAY "PERCENT RIFLE QUALIFIED..."
@ 14,60 SAY (ZZTOTAL-ZZRFL-ZZNARFL) USING '999'
@ 16,0 SAY "PISTOL QUAL..."
@ 16,24 SAY ((ZZTOTAL-ZZPST-ZZNAPST)/ZZTOTAL)*100 USING;
'999'
@ 16,31 SAY "PERCENT PISTOL QUALIFIED..."
@ 16,60 SAY (ZZTOTAL-ZZPST-ZZNAPST) USING '999'
@ 20,0
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
RELEASE ALL LIKE ZZ??????
USE
RETURN
```

E. TRAINING COUNT ROUTINE

```
* ROUTINE NAME: CNTTRNG.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.3.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 6NOV83
* VARIABLES USED: ONECO, TWOCO, THREECO, FOURCO, ONEPLT,
* TWOPLT, THREEPLT, *FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: ZZACOC, ZZBCOC, ZZCCOC, ZZAHIS,
* ZZBHIS, ZZCHIS, ZZACOD, ZZBCOD, ZZCCOD, ZZAINT, ZZBINT,
* ZZCINT, ZZAAID, ZZBAID, ZZCAID, ZZDAID, ZZEAID, ZZFAID,
* ZZGAID, ZZHAID, ZZIAID, ZZJAID, ZZKAID, ZZAUNI, ZZBUNI,
* ZZCUNI, ZZPFT1, ZZPFT2, ZZANBC, ZZBNBC, ZZCNBC, ZZDNBC,
* ZZENBC, ZZFNBC, ZZAMKS, ZZBMKS, ZZCMKS, ZZDMKS, ZZEMKS,
* ZZFMKS, ZZATAC, ZZBTAC, ZZCTAC, ZZDTAC, ZZETAC
* VARIABLES RELEASED: NONE
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: ZZTEMP (SAVES ALL VARIABLES UPON
* ENTERING THIS ROUTINE)
* USING ROUTINES: TRNGSTAT.PRG
* DESCRIPTION: THIS ROUTINE COUNTS THE NUMBER OF ESSENTIAL
* SUBJECT TRAINING ELEMENTS THAT HAVE BEEN COMPLETED.

SAVE TO ZZTEMP
RELEASE ALL
COUNT TO ZZTOTAL
COUNT FOR 'A'$(COC)  TO ZZACOC
COUNT FOR 'B'$(COC)  TO ZZBCOC
COUNT FOR 'C'$(COC)  TO ZZCCOC
COUNT FOR 'A'$(HIS)  TO ZZAHIS
COUNT FOR 'B'$(HIS)  TO ZZBHIS
COUNT FOR 'C'$(HIS)  TO ZZCHIS
COUNT FOR 'A'$(COD)  TO ZZACOD
COUNT FOR 'B'$(COD)  TO ZZBCOD
COUNT FOR 'C'$(COD)  TO ZZCCOD
COUNT FOR 'A'$(INT)  TO ZZAINT
COUNT FOR 'B'$(INT)  TO ZZBINT
COUNT FOR 'C'$(INT)  TO ZZCINT
COUNT FOR 'A'$(AID)  TO ZZAAID
COUNT FOR 'B'$(AID)  TO ZZBAID
COUNT FOR 'C'$(AID)  TO ZZCAID
COUNT FOR 'D'$(AID)  TO ZZDAID
COUNT FOR 'E'$(AID)  TO ZZEAID
COUNT FOR 'F'$(AID)  TO ZZFAID
COUNT FOR 'G'$(AID)  TO ZZGAID
COUNT FOR 'H'$(AID)  TO ZZHAID
COUNT FOR 'I'$(AID)  TO ZZIAID
COUNT FOR 'J'$(AID)  TO ZZJAID
COUNT FOR 'K'$(AID)  TO ZZKAID
COUNT FOR 'A'$(UNI)  TO ZZAUNI
COUNT FOR 'B'$(UNI)  TO ZZBUNI
COUNT FOR 'C'$(UNI)  TO ZZCUNI
COUNT FOR 'A'$(NBC)  TO ZZANBC
COUNT FOR 'B'$(NBC)  TO ZZBNBC
COUNT FOR 'C'$(NBC)  TO ZZCNBC
COUNT FOR 'D'$(NBC)  TO ZZDNBC
COUNT FOR 'E'$(NBC)  TO ZZENBC
COUNT FOR 'F'$(NBC)  TO ZZFNBC
COUNT FOR 'A'$(MKS)  TO ZZAMKS
COUNT FOR 'B'$(MKS)  TO ZZBMKS
COUNT FOR 'C'$(MKS)  TO ZZCMKS
COUNT FOR 'D'$(MKS)  TO ZZDMKS
COUNT FOR 'E'$(MKS)  TO ZZEMKS
COUNT FOR 'F'$(MKS)  TO ZZFMKS
COUNT FOR 'A'$(TAC)  TO ZZATAC
COUNT FOR 'B'$(TAC)  TO ZZBTAC
```

```
COUNT FOR 'C'$(TAC) TO ZZCTAC
COUNT FOR 'D'$(TAC) TO ZZDTAC
COUNT FOR 'E'$(TAC) TO ZZETAC
COUNT FOR '*'$(PFT1CISS) TO ZZPFT1
COUNT FOR '*'$(PFT2CISS) TO ZZPFT2
RETURN
```

F. QUALIFICATION COUNT ROUTINE

```
* ROUTINE NAME: CNTQUAL.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION:5.3.2.0
* AUTHOR: R.E. PRUIETT
* DATE: 08DEC83
* VARIABLES USED: NONE
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: ZZSWIM, ZZRFL, ZZNARFL, ZZPST, ZZNAPST
* VARIABLES RELEASED: NONE
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: TRNGSTAT.PRG
* DESCRIPTION: THIS ROUTINE FIRST SAVES ALL MEMORY
* VARIABLES IN A MEMORY FILE (ZZTOTAL) AND THEN COUNTS THE
* NUMBER OF PERSONS THAT HAVE NOT COMPLETED SWIMQUAL,
* RFLQUAL, PSTQUAL AND THOSE PERSONS NOT REQUIRED TO
* QUALIFY WITH THE RIFLE OR PISTOL (NA).
*
COUNT TO ZZTOTAL
COUNT FOR '**'$(SWIMQUAL) TO ZZSWIM
COUNT FOR '**'$(RFLQUAL) TO ZZRFL
COUNT FOR 'NA'$(RFLQUAL) TO ZZNARFL
COUNT FOR '**'$(PSTQUAL) TO ZZPST
COUNT FOR 'NA'$(PSTQUAL) TO ZZNAPST
RETURN
```

G. TRAINING ROSTER ROUTINE

```
* ROUTINE NAME: TRNGRCST.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.4.0
* AUTHOR: R. E. PRUIETT
* DATE: 20DEC83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO, ONEPLT, TWOPLT, THREEPLT, FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: COUNT, PROCEED
* VARIABLES RELEASED: NONE
* FILES (OPENED/CLOSED): A:PERS INDEX A:ALPHPERS (ALL FILES
* CLOSED)
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: STDRPT.PRG (5.0)
* DESCRIPTION: THIS ROUTINE PROVIDES THE "TRAINING ROSTER
* REPORT".  IT STARTS AT THE TOP OF THE PERS.DBF AND LOOKS
* AT EACH RECORD INDIVIDUALLY.  IF A RECORD CORRESPONDS TO
* THE UNIT SELECTED BY THE USER, THE ROUTINE TRNGRPT.PRG IS
* CALLED WHICH COLLECTS AND DISPLAYS THE TRAINING DATA THAT
* CORRESPONDS TO THE CURRENT PERS.DBF RECORD (E.G., IF THE
* USER WANTS TRAINING DATA ON EVERY MEMBER OF 1ST PLAT, A
* CO, TRNGRCST.PRG LOCATES EACH RECORD IN THE PERS.DBF
* WHICH BELONG TO 1ST PLAT, A CO.   TRNGRPT.PRG THEN
* DISPLAYS THE TRAINING DATA FROM THE APPROPRIATE DATABASE
* FILES.).  INFORMATION ON ONE INDIVIDUAL IS DISPLAYED IN
* SIX ROWS AND FOUR SETS OF DATA ARE DISPLAYED PER SCREEN.
* THE USER PRESS'S THE ENTER KEY TO SCROLL FORWARD TO EACH
* SUCCEEDING SET OF INDIVIDUAL DATA.

ERASE
@ 12,28 SAY "TRAINING ROSTER REPORT"
@ 22,0
ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
ERASE
SELECT PRIMARY
USE A:PERS INDEX A:ALPHPERS
GOTO TOP
STORE 0 TO COUNT
DO WHILE .NOT. EOF
DO CASE
   CASE !(MUNIT) = 'E'
      DO TRNGRPT
      STORE COUNT + 1 TO COUNT
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
      IF COMPANY = ONECO
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
      IF COMPANY = ONECO .AND. PLATOON = ONEPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
      IF COMPANY = ONECO .AND. PLATOON = TWOPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
      IF COMPANY = ONECO .AND. PLATOON = THREEPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
      IF COMPANY = ONECO .AND. PLATOON = FOURPLT
         DO TRNGRPT
```

```
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
      IF COMPANY = TWOCO
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
      IF COMPANY = TWOCO .AND. PLATOON = ONEPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
      IF COMPANY = TWOCO .AND. PLATOON = TWOPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
      IF COMPANY = TWOCO .AND. PLATOON = THREEPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
      IF COMPANY = TWOCO .AND. PLATOON = FOURPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
      IF COMPANY = THREECO
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
      IF COMPANY = THREECO .AND. PLATOON = ONEPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
      IF COMPANY = THREECO .AND. PLATOON = TWOPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
      IF COMPANY = THREECO .AND. PLATOON = THREEPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
      IF COMPANY = THREECO .AND. PLATOON = FOURPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
      IF COMPANY = FOURCO
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
      IF COMPANY = FOURCO .AND. PLATOON = ONEPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
      IF COMPANY = FOURCO .AND. PLATOON = TWOPLT
      DO TRNGRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
      IF COMPANY = FOURCO .AND. PLATOON = THREEPLT
```

```
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
      IF COMPANY = FOURCO .AND. PLATOON = FOURPLT
         DO TRNGRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
ENDCASE
IF COUNT = 4
   @ 22,0
   ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
   STORE 0 TO COUNT
   ERASE
ENDIF
SELECT PRIMARY
SKIP
ENDDO
RELEASE COUNT,PROCEED,MSSN
USE
RETURN
```

B. TRAINING ROSTER FORMAT ROUTINE

```
* ROUTINE NAME:
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.4.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 15DEC83
* VARIABLES USED: COUNT, PLATNAME, UNITNAME, MPLAT, MUNIT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: ROW, MSSN
* VARIABLES RELEASED: NONE * FILES OPENED/CLOSED: B:QUAL
* INDEX B:QUALSSN, B:EST INDEX B:ESTSSN
* TEMP FILES CREATED:
* USING SUBROUTINES: TRNGROST.PRG
* DESCRIPTION: THIS ROUTINE PROVIDES THE FORMAT AND
* DISPLAYS THE "TRAINING ROSTER REPORT".

STORE (COUNT * 6) TO ROW
@ ROW,0 SAY NAME
@ ROW,30 SAY RANK
@ ROW,33 SAY COMPANY
STORE SSN TO MSSN
SELECT SECONDARY
USE B:QUAL INDEX B:QUALSSN
FIND &MSSN
@ ROW,39 SAY "SWIM QUAL "
@ ROW,49 SAY SWIMQUAL
@ ROW,52 SAY "RIFLE QUAL "
@ ROW,63 SAY RFLQUAL
@ ROW,66 SAY "PISTOL QUAL "
@ ROW,78 SAY PSTQUAL
SELECT SECONDARY
USE B:EST INDEX B:ESTSSN
FIND &MSSN
@ ROW + 1,0 SAY "CODE OF CONDUCT "
@ ROW + 1,16 SAY COC
@ ROW + 1,22 SAY "MARCOR HIS "
@ ROW + 1,35 SAY HIS
@ ROW + 1,43 SAY "MARKSMANSHIP "
@ ROW + 1,56 SAY MKS
@ ROW + 1,67 SAY "DRILL "
@ ROW + 1,74 SAY COD
@ ROW + 2,0 SAY "INTERIOR GUARD "
@ ROW + 2,16 SAY INT
@ ROW + 2,22 SAY "MARKSMANSHIP "
@ ROW + 2,35 SAY MKS
@ ROW + 2,43 SAY "TAC MEASURES "
@ ROW + 2,56 SAY TAC
@ ROW + 2,67 SAY "NBC "
@ ROW + 2,74 SAY NBC
@ ROW + 3,0 SAY "PFT1 "
@ ROW + 3,6 SAY PFT1CLSS
@ ROW + 3,10 SAY "PFT2 "
@ ROW + 3,16 SAY PFT2CLSS
@ ROW + 3,22 SAY "EQUIP/UNIFORM "
@ ROW + 3,36 SAY UNI
@ ROW + 3,43 SAY "FIRST AID "
@ ROW + 3,54 SAY AID
RETURN
```

I. MARKSMANSHIP STATUS ROUTINE

```
* ROUTINE NAME: MKSSTAT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.6.0
* AUTHOR: R.E. PRUIETT
* DATE: 28NOV83
* VARIABLES USED:UNITNAME,PLATNAME
* VARIABLES MODIFIED:NO GLOBAL VARIABLES MODIFIED
* VARIABLES CREATED: RFLEX, RFLSS, RFLMM, RFLUN, PSTEX,
* PSTSS, PSTMM, PSTUN, RFLSHOT, PCTEX, PCTSS, PCTMM, PCTUN,
* PCTEXPST, PCTSSPST, PCTMMPST, PCTUNPST, PROCEED, ANALYZE6
* VARIABLES RELEASED: PST?????, PCT?????, RFLEX, RFLSS,
* RFLMM, RFLUN, PROCEED, ANALYZE6
* FILES (OPENED/CLOSED):ALL CLOSED
* TEMP FILES CREATED:MRKSTEMP,MKSTEMP
* USING SUBROUTINES:STDRPT.PRG
* DESCRIPTION:THIS ROUTINE CREATES A TEMPORARY FILE WHICH
* CONTAINS THE CURRENT YEAR RIFLE AND PISTOL QUALIFICATION
* RESULTS FOR EACH MEMBER IN THE SELECTED COMPANY AND/OR
* PLATOON.  THE RESULTS ARE TOTALED BY QUALIFICATION
* CATEGORY FOR THE RIFLE AND PISTOL.  PERCENTAGES ARE
* CALCULATED AND DISPLAYED IN A SUMMARY STATUS REPORT WHICH
* IS AUTOMATICALLY DISPLAYED ON THE SCREEN.
ERASE
DO CVRTUNIT
DO CASE
     CASE !(MUNIT)='E'
         USE B:QUAL
     CASE !(MUNIT)<>'E' .AND. !(MPLAT)='E'
         USE A:PERS
         COPY TO MRKSTEMP ALL FIELD SSN FOR COMPANY=UNITNAME
         USE MRKSTEMP
         SELECT SECONDARY
         USE B:QUAL
         SELECT PRIMARY
         JOIN TO MKSTEMP FOR P.SSN = S.SSN FIELDS RFLQUAL,;
         PSTQUAL
         USE MKSTEMP
     CASE !(MUNIT)<>'E' .AND !(MPLAT)<>'E'
         USE A:PERS
         COPY TO MRKSTEMP ALL FIELD SSN FOR COMPANY=UNITNAME;
         .AND. PLATOON = PLATNAME
         USE MRKSTEMP
         SELECT SECONDARY
         USE B:QUAL
         SELECT PRIMARY
         JOIN TO MKSTEMP FOR P.SSN = S.SSN FIELDS RFLQUAL,;
         PSTQUAL
         USE MKSTEMP
ENDCASE
COUNT FOR RFLQUAL = 'EX' TO RFLEX
COUNT FOR RFLQUAL = 'SS' TO RFLSS
COUNT FOR RFLQUAL = 'MM' TO RFLMM
COUNT FOR RFLQUAL = 'UN' TO RFLUN
COUNT FOR PSTQUAL = 'EX' TO PSTEX
COUNT FOR PSTQUAL = 'SS' TO PSTSS
COUNT FOR PSTQUAL = 'MM' TO PSTMM
COUNT FOR PSTQUAL = 'UN' TO PSTUN
ERASE
STORE (RFLEX+RFLSS+RFLMM+RFLUN) TO RFLSHOT
IF RFLSHOT > 0
  STORE (RFLEX/RFLSHOT*100) TO PCTEX
  STORE (RFLSS/RFLSHOT*100) TO PCTSS
  STORE (RFLMM/RFLSHOT*100) TO PCTMM
  STORE (RFLUN/RFLSHOT*100) TO PCTUN
ENDIF
STORE (PSTEX+PSTSS+PSTMM+PSTUN) TO PSTSHOT
```

```
IF PSTSHOT > 0
  STORE (PSTEX/PSTSHOT*100) TO PCTEXPST
  STORE (PSTSS/PSTSHOT*100) TO PCTSSPST
  STORE (PSTMM/PSTSHOT*100) TO PCTMMPST
  STORE (PSTUN/PSTSHOT*100) TO PCTUNPST
ENDIF
@ 1,30 SAY "MARKSMANSHIP STATUS REPORT"
@ 3,1 SAY "RIFLE EXPERTS.........."
@ 3,23 SAY RFLEX
@ 3,39 SAY "PISTOL EXPERTS.........."
@ 3,63 SAY PSTEX
@ 5,1 SAY "RIFLE SHARPSHOOTERS...."
@ 5,23 SAY RFLSS
@ 5,39 SAY "PISTOL SHARPSHOOTERS...."
@ 5,63 SAY PSTSS
@ 7,1 SAY "RIFLE MARKSMEN........."
@ 7,23 SAY RFLMM
@ 7,39 SAY "PISTOL MARKSMEN........."
@ 7,63 SAY PSTMM
@ 9,1 SAY "UNQUALIFIED............"
@ 9,23 SAY RFLUN
@ 9,39 SAY "UNQUALIFIED............."
@ 9,63 SAY PSTUN
@ 11,1 SAY "TOTAL ................."
@ 11,23 SAY RFLSHOT
@ 11,39 SAY "TOTAL..................."
@ 11,63 SAY PSTSHOT
@ 15,34 SAY "PERCENTAGES"
@ 16,34 SAY "-----------"
IF RFLSHOT > 0
  @ 18,1 SAY "RIFLE EXPERTS............"
  @ 18,23 SAY PCTEX
  @ 19,1 SAY "RIFLE SHARPSHOOTERS......"
  @ 19,23 SAY PCTSS
  @ 20,1 SAY "RIFLE MARKSMEN..........."
  @ 20,23 SAY PCTMM
  @ 21,1 SAY "UNQUALIFIED.............."
  @ 21,23 SAY PCTUN
ELSE
  @ 18,1 SAY "NO UNIT MEMBERS HAVE FIRED THE "
  @ 20,1 SAY "RIFLE FOR QUALIFICATION THIS YEAR."
ENDIF
IF PSTSHOT > 0
  @ 18,39 SAY "PISTOL EXPERTS........."
  @ 18,63 SAY PCTEXPST
  @ 19,39 SAY "PISTOL SHARPSHOOTERS..."
  @ 19,63 SAY PCTSSPST
  @ 20,39 SAY "PISTOL MARKSMEN........"
  @ 20,63 SAY PCTMMPST
  @ 21,39 SAY "UNQUALIFIED............"
  @ 21,63 SAY PCTUNPST
ELSE
  @ 18,39 SAY "NO UNIT MEMBERS HAVE FIRED THE"
  @ 20,39 SAY "PISTOL FOR QUALIFICATION THIS YEAR"
ENDIF
@ 22,0
ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
RELEASE ALL LIKE PST?????
RELEASE ALL LIKE PCT?????
ERASE
ACCEPT "DO YOU WANT TO DO A COMPANY/BATTALION RANGE QUOTA;
ANALYSIS? (Y/N) " TO ANALYZE6
IF !(ANALYZE6) = 'Y'
   DO B:QTASTUDY
ENDIF
RELEASE RFLEX,RFLSS,RFLMM,RFLUN,RFLS,PROCEED,ANALYZE6
USE
RETURN
```

J. CONVERT UNIT ROUTINE

```
* ROUTINE NAME: CVRTUNIT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.6.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 28NOV83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO, ONEPLT, TWOPLT, THREEPLT, FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: UNITNAME, PLATNAME
* VARIABLES RELEASED: NONE
* FILES (OPENED/CLOSED): NONE
* TEMP FILES CREATED:NONE
* USING SUBROUTINES: MKSSTAT.PRG (5.6.0) AND MOSSTAT.PRG
* (5.8.0)
* DESCRIPTION: THIS ROUTINE STORES THE NAME OF THE COMPANY
* AND PLATOON SELECTED BY THE USER DURING ROUTINE
*  SLCTUNIT'.  IT IS NECESSARY BECAUSE WHEN THE USER
* SELECTS A UNIT AND SUBUNIT IT IS DONE BY MENU SELECTION.
* ACCORDINGLY THE ONLY THING STORED INTO MEMORY IS THE
* CORRESPONDING LETTER FROM THE MENU PROVIDED BY THE
* SLCTUNIT.PRG (A, B, C, D, E).  SOME SCREEN DISPLAYS
* REQUIRE THE UNIT NAME ( E.G., "A CO" VICE "A" ) SO A
* CONVERSION IS NECESSARY.

DO CASE
   CASE !(MUNIT)='A'
      STORE ONECO TO UNITNAME
   CASE !(MUNIT)='B'
      STORE TWOCO TO UNITNAME
   CASE !(MUNIT)='C'
      STORE THREECO TO UNITNAME
   CASE !(MUNIT)='D'
      STORE FOURCO TO UNITNAME
ENDCASE
IF !(MUNIT) <> 'E'
DO CASE
   CASE !(MPLAT)='A'
      STORE ONEPLT TO PLATNAME
   CASE !(MPLAT)='B'
      STORE TWOPLT TO PLATNAME
   CASE !(MPLAT)='C'
      STORE THREEPLT TO PLATNAME
   CASE !(MPLAT)='D'
      STORE FOURPLT TO PLATNAME
ENDCASE
ENDIF
RETURN
```

K. QUOTA STUDY ROUTINE

```
* ROUTINE NAME: QTASTUDY.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.6.2.0
* AUTHOR: R.E. PRUIETT
* DATE: 15DEC83
* VARIABLES USED: UNITNAME, PLATNAME, RFLSHOT, RFLEX,
* RFLSS, RFLMM, RFLUN, MUNIT, QFEB, QMAR,
* ...,QDEC
* VARIABLES MODIFIED: NO GLOBAL VARIABLES MODIFIED
* VARIABLES CREATED: RFLNA, MONTH, TOTALREC, MLEFT, MSUM,
* NEEDED, EXTRA, WHATIF
* VARIABLES RELEASED: MONTH, WHATIF, EXTRA, NEEDED, MSUM,
* MLEFT, TOTALREC, RFLNA, Q???
* FILES (OPENED/CLOSED): NONE
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: MKSSTAT.PRG
* DESCRIPTION: THIS MODULE IS USED BY MKSSTAT.PRG AND
* DISPLAYS THE RANGE QUOTAS THAT REMAIN FOR THE CURRENT
* YEAR.  THE CURRENT MONTH IS EXTRACTED FROM THE 'LOG ON
* DATE' AND THE RANGE QUOTAS FOR EACH UNIT IS STORED IN A
* MEMORY FILE DURING THE ANNUAL INITIALIZATION PROCEDURE.
* SUMMARY INFORMATION IS PROVIDED CONCERNING THE RELATION-
* SHIP BETWEEN REMAINING RANGE QUOTA REQUIREMENTS AND
* REMAINING RANGE QUOTA ALLOCATIONS.  UPON CONCLUSSION OF
* THE MODULE THE USER MAY RETURN TO THE STANDARD REPORT
* MENU OR TO A SCRATCH PAD TO REVISE QUOTA ASSIGNMENTS.
* REVISED QUOTA ASSIGNMENTS FROM THE SCRATCH PAD CAN EITHER
* BE SAVED OR IGNORED.

ERASE
DO CASE
   CASE !(MUNIT) <> 'B' .AND. !(MPLAT) = 'B'
      @ 1,15 SAY "RANGE QUOTA ANALYSIS FOR "
      @ 1,40 SAY UNITNAME
   CASE !(MUNIT) <> 'B' .AND. !(MPLAT) <> 'B'
      @ 1,15 SAY "RANGE QUOTA ANALYSIS FOR "
      @ 1,40 SAY UNITNAME
      @ 1,46 SAY ","
      @ 1,48 SAY PLATNAME
   CASE !(MUNIT) = 'B'
      @ 1,15 SAY "RANGE QUOTA ANALYSIS FOR BATTALION"
ENDCASE
COUNT FOR RFLQUAL = 'NA' TO RFLNA
STORE $(AADATE,3,2) TO MONTH
GOTO BOTTOM
STORE # TO TOTALREC
@ 4,1 SAY "NUMBER OF MARINES FIRED FOR QUALIFICATION;
DURING"
@ 5,1 SAY "CURRENT;
YEAR..................................."
@ 5,50 SAY RFLSHOT
@ 6,1 SAY "NUMBER OF MARINES FIRED FOR QUALIFICATION;
DURING"
@ 7,1 SAY "CURRENT YEAR BUT DID NOT;
QUALIFY................."
@ 7,50 SAY RFLUN
@ 8,1 SAY "NUMBER OF MARINES NOT REQUIRED TO QUALIFY;
DURING"
@ 9,1 SAY "CURRENT;
YEAR..................................."
@ 9,50 SAY RFLNA
STORE (TOTALREC - RFLNA - RFLEX -RFLSS - RFLMM) TO MLEFT
@ 10,1 SAY "MARINES LEFT TO QUALIFY DURING CURRENT;
YEAR....."
@ 10,50 SAY MLEFT
DO CASE
```

```
  CASE !(MUNIT) = 'A'
     RESTORE FROM A:ARNGQTAS ADDITIVE
  CASE !(MUNIT) = 'B'
     RESTORE FROM A:BRNGQTAS ADDITIVE
  CASE !(MUNIT) = 'C'
     RESTORE FROM A:CRNGQTAS ADDITIVE
  CASE !(MUNIT) = 'D'
     RESTORE FROM A:DRNGQTAS ADDITIVE
  CASE !(MUNIT) = 'E'
     RESTORE FROM A:ENRNGQTA ADDITIVE
ENDCASE
DO CASE
 CASE MONTH ='01'
  @ 12,4 SAY "FEB   MAR   APR   MAY   JUN   JUL   AUG;
  SEP   OCT   NOV   DEC"
  @ 14,4 SAY  STR(QFEB,3)
  @ 14,10  SAY  STR(QMAR,3)
  @ 14,16  SAY  STR(QAPR,3)
  @ 14,22  SAY STR(QMAY,3)
  @ 14,28  SAY STR(QJUN,3)
  @ 14,34  SAY STR(QJUL,3)
  @ 14,40  SAY STR(QAUG,3)
  @ 14,46  SAY STR(QSEP,3)
  @ 14,52  SAY STR(QOCT,3)
  @ 14,58  SAY STR(QNOV,3)
  @ 14,64  SAY STR(QDEC,3)
  STORE (QFEB+ QMAR+ QAPR+ QMAY+ QJUN+ QJUL+ QAUG+ QSEP+;
  QOCT+ QNOV+ QDEC) TO MSUM
  @ 16,4 SAY "A TOTAL OF "
  @ 16,15 SAY STR(MSUM,3)
  @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
 CASE MONTH ='02'
  @ 12,4 SAY "MAR   APR   MAY   JUN   JUL   AUG   SEP;
  OCT   NOV   DEC"
  @ 14,4 SAY  STR(QMAR,3)
  @ 14,10  SAY  STR(QAPR,3)
  @ 14,16  SAY STR(QMAY,3)
  @ 14,22  SAY STR(QJUN,3)
  @ 14,28  SAY STR(QJUL,3)
  @ 14,34  SAY STR(QAUG,3)
  @ 14,40  SAY STR(QSEP,3)
  @ 14,46  SAY STR(QOCT,3)
  @ 14,52  SAY STR(QNOV,3)
  @ 14,58  SAY STR(QDEC,3)
  STORE (QMAR+ QAPR+ QMAY+ QJUN+ QJUL+ QAUG+ QSEP+ QOCT+;
  QNOV+ QDEC) TO MSUM
  @ 16,4 SAY "A TOTAL OF "
  @ 16,15 SAY STR(MSUM,3)
  @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
 CASE MONTH ='03'
  @ 12,4 SAY "APR   MAY   JUN   JUL   AUG   SEP   OCT;
  NOV   DEC"
  @ 14,4 SAY  STR(QAPR,3)
  @ 14,10  SAY STR(QMAY,3)
  @ 14,16  SAY STR(QJUN,3)
  @ 14,22  SAY STR(QJUL,3)
  @ 14,28  SAY STR(QAUG,3)
  @ 14,34  SAY STR(QSEP,3)
  @ 14,40  SAY STR(QOCT,3)
  @ 14,46  SAY STR(QNOV,3)
  @ 14,52  SAY STR(QDEC,3)
  STORE (QAPR+QMAY+QJUN+QJUL+QAUG+QSEP+QOCT+QNOV+QDEC) ;
  TO MSUM
  @ 16,4 SAY "A TOTAL OF "
  @ 16,15 SAY STR(MSUM,3)
  @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
 CASE MONTH ='04'
  @ 12,4 SAY "MAY   JUN   JUL   AUG   SEP   OCT   NOV;
  DEC"
```

```
 @ 14,4 SAY STR(QMAY,3)
 @ 14,10 SAY STR(QJUN,3)
 @ 14,16 SAY STR(QJUL,3)
 @ 14,22 SAY STR(QAUG,3)
 @ 14,28 SAY STR(QSEP,3)
 @ 14,34 SAY STR(QOCT,3)
 @ 14,40 SAY STR(QNOV,3)
 @ 14,48 SAY STR(QDEC,3)
 STORE (QMAY+QJUN+QJUL+QAUG+QSEP+QOCT+QNOV+QDEC) TO MSUM
 @ 16,4 SAY "A TOTAL OF "
 @ 16,15 SAY STR(MSUM,3)
 @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
CASE MONTH ='05'
 @ 12,4 SAY "JUN   JUL   AUG   SEP   OCT   NOV   DEC"
 @ 14,4 SAY STR(QJUN,3)
 @ 14,10 SAY STR(QJUL,3)
 @ 14,16 SAY STR(QAUG,3)
 @ 14,22 SAY STR(QSEP,3)
 @ 14,28 SAY STR(QOCT,3)
 @ 14,34 SAY STR(QNOV,3)
 @ 14,40 SAY STR(QDEC,3)
 STORE (QJUN+QJUL+QAUG+QSEP+QOCT+QNOV+QDEC) TO MSUM
 @ 16,4 SAY "A TOTAL OF "
 @ 16,15 SAY STR(MSUM,3)
 @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
CASE MONTH ='06'
 @ 12,4 SAY "JUL   AUG   SEP   OCT   NOV   DEC"
 @ 14,4 SAY STR(QJUL,3)
 @ 14,10 SAY STR(QAUG,3)
 @ 14,16 SAY STR(QSEP,3)
 @ 14,22 SAY STR(QOCT,3)
 @ 14,28 SAY STR(QNOV,3)
 @ 14,34 SAY STR(QDEC,3)
 STORE (QJUL+QAUG+QSEP+QOCT+QNOV+QDEC) TO MSUM
 @ 16,4 SAY "A TOTAL OF "
 @ 16,15 SAY STR(MSUM,3)
 @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
CASE MONTH ='07'
 @ 12,4 SAY "AUG   SEP   OCT   NOV   DEC"
 @ 14,4 SAY STR(QAUG,3)
 @ 14,10 SAY STR(QSEP,3)
 @ 14,16 SAY STR(QOCT,3)
 @ 14,22 SAY STR(QNOV,3)
 @ 14,28 SAY STR(QDEC,3)
 STORE (QAUG+QSEP+QOCT+QNOV+QDEC) TO MSUM
 @ 16,4 SAY "A TOTAL OF "
 @ 16,15 SAY STR(MSUM,3)
 @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
CASE MONTH ='08'
 @ 12,4 SAY "SEP   OCT   NOV   DEC"
 @ 14,4 SAY STR(QSEP,3)
 @ 14,10 SAY STR(QOCT,3)
 @ 14,16 SAY STR(QNOV,3)
 @ 14,22 SAY STR(QDEC,3)
 STORE (QSEP+QOCT+QNOV+QDEC) TO MSUM
 @ 16,4 SAY "A TOTAL OF "
 @ 16,15 SAY STR(MSUM,3)
 @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
CASE MONTH ='09'
 @ 12,4 SAY "OCT   NOV   DEC"
 @ 14,4 SAY STR(QOCT,3)
 @ 14,10 SAY STR(QNOV,3)
 @ 14,16 SAY STR(QDEC,3)
 STORE (QOCT+QNOV+QDEC) TO MSUM
 @ 16,4 SAY "A TOTAL OF "
 @ 16,15 SAY STR(MSUM,3)
 @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
CASE MONTH ='10'
 @ 12,4 SAY "NOV   DEC"
```

```
   @ 14,4 SAY STR(QNOV,3)
   @ 14,10 SAY STR(QDEC,3)
   STORE (QNOV+QDEC) TO MSUM
   @ 16,4 SAY "A TOTAL OF "
   @ 16,15 SAY STR(MSUM,3)
   @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
  CASE MONTH ='11'
   @ 12,4 SAY "DEC"
   @ 14,4 SAY STR(QDEC,3)
   STORE (QDEC) TO MSUM
   @ 16,4 SAY "A TOTAL OF "
   @ 16,15 SAY STR(MSUM,3)
   @ 16,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."
  CASE MONTH ='12'
   @ 14,10 SAY "THIS IS THE LAST MONTH IN CALENDAR YEAR"
ENDCASE
DO CASE
   CASE (MSUM = MLEFT)
     @ 18,4 SAY "REMAINING QUOTAS EQUAL NUMBER OF MARINES;
     LEFT TO QUALIFY.."
     @ 18,64 SAY STR(MSUM,3)
   CASE (MLEFT > MSUM)
     @ 18,4 SAY "YOU NEED "
     STORE (MLEFT - MSUM) TO NEEDED
     @ 18,13 SAY STR(NEEDED,3)
     @ 18,19 SAY "MORE QUOTAS FOR THE YEAR."
   CASE (MSUM > MLEFT)
     @ 18,4 SAY "YOU HAVE "
     STORE (MSUM - MLEFT) TO EXTRA
     @ 18,13 SAY STR(EXTRA,3)
     @ 18,18 SAY "EXTRA QUOTAS."
ENDCASE
@ 19,1 SAY "SELECT ONE"
@ 20,1 SAY "A...CHANGE QUOTAS ON SCRATCH PAD"
@ 21,1 SAY "B...RETURN TO STANDARD REPORT MENU"
@ 22,0
ACCEPT "SELECT OPTION ===> " TO WHATIF
IF ! (WHATIF) = 'A'
   DO B:QUOTAPAD
ENDIF
RELEASE MONTH,WHATIF,EXTRA,NEEDED,MSUM,MLEFT,TOTALREC,RFLNA
RELEASE ALL LIKE Q???
RETURN
```

I. QUOTA SCRATCH PAD ROUTINE

```
* ROUTINE NAME: QUOTAPAD.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.6.2.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 5DEC83
* VARIABLES USED: MLEFT, MUNIT
* VARIABLES MODIFIED:
* VARIABLES CREATED: PICKMNTH, TEMPSUM, WHICHWAY, CONTINUE,
* QFEB...QDEC, EXTRA
* VARIABLES RELEASED: Q???, MLEFT, TEMPSUM, WHICHWAY,
* PICKMNTH, CONTINUE, EXTRA
* FILES (OPENED/CLOSED): NONE
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: QTASTUDY.PRG
* DESCRIPTION: THIS MODULE GIVES THE USER AN OPPORTUNITY TO
* INTER-ACTIVELY MODIFY THE REMAINING MONTHLY RANGE
* QUOTAS.  THIS CAN BE DONE AN UNLIMITED NUMBER OF TIMES
* EACH TIME RETURNING TO THE ACTUAL MONTHLY ALLOCATION AS
* BASE DATA.  HOWEVER, IF THE USER ELECTS TO PERMANENTLY
* REPLACE THE MONTHLY QUOTA ALLOCATION IN MEMORY, HE MAY DO
* SO BY SELECTING THE 'REPLACE CURRENT QUOTAS' OPTION.


STORE T TO PICKMNTH
SET COLON OFF

DO CASE
  CASE MONTH ='01'
      DO WHILE PICKMNTH = T
      DO CASE
         CASE !(MUNIT) = 'A'
            RESTORE FROM A:ARNGQTAS ADDITIVE
         CASE !(MUNIT) = 'B'
            RESTORE FROM A:BRNGQTAS ADDITIVE
         CASE !(MUNIT) = 'C'
            RESTORE FROM A:CRNGQTAS ADDITIVE
         CASE !(MUNIT) = 'D'
            RESTORE FROM A:DRNGQTAS ADDITIVE
         CASE !(MUNIT) = 'E'
            RESTORE FROM A:BNRNGQTA ADDITIVE
      ENDCASE
         ERASE
         @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
         @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
         CALCULATIONS AND WILL BE SAVED"
         @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
         CURRENT QUOTAS' OPTION "
         @ 6,0 SAY "**************************************;
         **************************"
         @ 8,5 SAY "FEB   MAR   APR   MAY   JUN   JUL;
         AUG   SEP   OCT   NOV   DEC"
         @ 10,4 GET QFEB PICTURE '999'
         @ 10,10 GET QMAR PICTURE '999'
         @ 10,16 GET QAPR PICTURE '999'
         @ 10,22 GET QMAY PICTURE '999'
         @ 10,28 GET QJUN PICTURE '999'
         @ 10,34 GET QJUL PICTURE '999'
         @ 10,40 GET QAUG PICTURE '999'
         @ 10,46 GET QSEP PICTURE '999'
         @ 10,52 GET QOCT PICTURE '999'
         @ 10,58 GET QNOV PICTURE '999'
         @ 10,64 GET QDEC PICTURE '999'
         READ

         @ 12,4 SAY "A TOTAL OF "
         STORE (QFEB+QMAR+QAPR+QMAY+QJUN+QJUL+;
```

```
      QAUG+QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
      @ 12,15 SAY STR(TEMPSUM,3)
      @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

      DO CASE
        CASE (TEMPSUM = MLEFT)
           @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
           LEFT TO QUALIFY..."
           @ 14,53 SAY STR(TEMPSUM,3)
        CASE (MLEFT > TEMPSUM)
           @ 14,4 SAY "YOU NEED "
           STORE (MLEFT - TEMPSUM) TO NEEDED
           @ 14,13 SAY STR(NEEDED,3)
           @ 14,19 SAY "MORE QUOTAS."
        CASE (TEMPSUM > MLEFT)
           @ 14,4 SAY "YOU HAVE "
           STORE (TEMPSUM - MLEFT) TO EXTRA
           @ 14,13 SAY STR(EXTRA,3)
           @ 14,18 SAY "EXCESS QUOTAS."
        ENDCASE
    @ 15,24 SAY "SELECT ONE OPTION"
    @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
    @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
    SELECTION MENU"
    @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL QUOTAS"
    ACCEPT "SELECT ONE ===> " TO WHICHWAY

    DO CASE
       CASE !(WHICHWAY) = 'B'
          STORE F TO PICKMNTH
       CASE !(WHICHWAY) = 'C'
          ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
          ORIGINAL SET OF QUOTAS (Y/N)?"; TO CONTINUE
          IF CONTINUE
             DO CASE
                CASE !(MUNIT) = 'A'
                   SAVE TO A:ARNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'B'
                   SAVE TO A:BRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'C'
                   SAVE TO A:CRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'D'
                   SAVE TO A:DRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='02'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
```

```
  ERASE
  @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
  @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
  CALCULATIONS AND WILL BE SAVED"
  @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
  CURRENT QUOTAS' OPTION "
  @ 6,0 SAY "************************************;
  **************************"
  @ 8,5 SAY "     MAR   APR   MAY   JUN   JUL;
  AUG   SEP   OCT   NOV   DEC"
  @ 10,10 GET QMAR PICTURE '999'
  @ 10,16 GET QAPR PICTURE '999'
  @ 10,22 GET QMAY PICTURE '999'
  @ 10,28 GET QJUN PICTURE '999'
  @ 10,34 GET QJUL PICTURE '999'
  @ 10,40 GET QAUG PICTURE '999'
  @ 10,46 GET QSEP PICTURE '999'
  @ 10,52 GET QOCT PICTURE '999'
  @ 10,58 GET QNOV PICTURE '999'
  @ 10,64 GET QDEC PICTURE '999'
  READ

  @ 12,4 SAY "A TOTAL OF "
  STORE (QMAR+QAPR+QMAY+QJUN+QJUL+;
  QAUG+QSEP+QOCT+QNOV +QDEC) TO TEMPSUM
  @ 12,15 SAY STR(TEMPSUM,3)
  @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

  DO CASE
    CASE (TEMPSUM = MLEFT)
       @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
       LEFT TO QUALIFY..."
       @ 14,53 SAY STR(TEMPSUM,3)
    CASE (MLEFT > TEMPSUM)
       @ 14,4 SAY "YOU NEED "
       STORE (MLEFT - TEMPSUM) TO NEEDED
       @ 14,13 SAY STR(NEEDED,3)
       @ 14,19 SAY "MORE QUOTAS."
    CASE (TEMPSUM > MLEFT)
       @ 14,4 SAY "YOU HAVE "
       STORE (TEMPSUM - MLEFT) TO EXTRA
       @ 14,13 SAY STR(EXTRA,3)
       @ 14,18 SAY "EXCESS QUOTAS."
    ENDCASE

@ 15,24 SAY "SELECT ONE OPTION"
@ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
@ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
SELECTION MENU"
@ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL;
QUOTAS"
ACCEPT "SELECT ONE ===> " TO WHICHWAY

DO CASE
   CASE !(WHICHWAY) = 'B'
      STORE F TO PICKMNTH
   CASE !(WHICHWAY) = 'C'
      ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
      ORIGINAL SET OF QUOTAS (Y/N)?" TO CONTINUE
      IF CONTINUE
         DO CASE
            CASE !(MUNIT) = 'A'
               SAVE TO A:ARNGQTAS ALL LIKE Q???
            CASE !(MUNIT) = 'B'
               SAVE TO A:BRNGQTAS ALL LIKE Q???
            CASE !(MUNIT) = 'C'
               SAVE TO A:CRNGQTAS ALL LIKE Q???
            CASE !(MUNIT) = 'D'
               SAVE TO A:DRNGQTAS ALL LIKE Q???
```

```
                CASE !(MUNIT) = 'E'
                    SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='03'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
      ERASE
      @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
      @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
      CALCULATIONS AND WILL BE SAVED"
      @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
      CURRENT QUOTAS' OPTION "
      @ 6,0 SAY "**********************************;
      *************************"
      @ 8,5 SAY "            APR   MAY   JUN   JUL;
      AUG   SEP   OCT   NOV   DEC"
      @ 10,16 GET QAPR PICTURE '999'
      @ 10,22 GET QMAY PICTURE '999'
      @ 10,28 GET QJUN PICTURE '999'
      @ 10,34 GET QJUL PICTURE '999'
      @ 10,40 GET QAUG PICTURE '999'
      @ 10,46 GET QSEP PICTURE '999'
      @ 10,52 GET QOCT PICTURE '999'
      @ 10,58 GET QNOV PICTURE '999'
      @ 10,64 GET QDEC PICTURE '999'
      READ

      @ 12,4 SAY "A TOTAL OF "
      STORE (QAPR+QMAY+QJUN+QJUL+;
      QAUG+QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
      @ 12,15 SAY STR(TEMPSUM,3)
      @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

      DO CASE
        CASE (TEMPSUM = MLEFT)
           @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
           LEFT TO QUALIFY..."
           @ 14,53 SAY STR(TEMPSUM,3)
        CASE (MLEFT > TEMPSUM)
           @ 14,4 SAY "YOU NEED "
           STORE (MLEFT - TEMPSUM) TO NEEDED
           @ 14,13 SAY STR(NEEDED,3)
           @ 14,19 SAY "MORE QUOTAS."
        CASE (TEMPSUM > MLEFT)
           @ 14,4 SAY "YOU HAVE "
           STORE (TEMPSUM - MLEFT) TO EXTRA
           @ 14,13 SAY STR(EXTRA,3)
           @ 14,18 SAY "EXCESS QUOTAS."
        ENDCASE
```

```
    @ 15,24 SAY "SELECT ONE OPTION"
    @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
    @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
    SELECTION MENU"
    @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL;
    QUOTAS"
    ACCEPT "SELECT ONE ===> " TO WHICHWAY

    DO CASE
       CASE !(WHICHWAY) = 'B'
          STORE F TO PICKMNTH
       CASE !(WHICHWAY) = 'C'
          ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
          ORIGINAL SET OF QUOTAS (Y/N)?" TO CONTINUE
          IF CONTINUE
             DO CASE
                CASE !(MUNIT) = 'A'
                   SAVE TO A:ARNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'B'
                   SAVE TO A:BRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'C'
                   SAVE TO A:CRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'D'
                   SAVE TO A:DRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='04'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
      ERASE
      @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
      @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
      CALCULATIONS AND WILL BE SAVED"
      @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
      CURRENT QUOTAS' OPTION "
      @ 6,0 SAY "**********************************;
      ************************"
      @ 8,5 SAY "                    MAY   JUN   JUL;
      AUG   SEP   OCT   NOV   DEC"
      @ 10,22 GET QMAY PICTURE '999'
      @ 10,28 GET QJUN PICTURE '999'
      @ 10,34 GET QJUL PICTURE '999'
      @ 10,40 GET QAUG PICTURE '999'
      @ 10,46 GET QSEP PICTURE '999'
      @ 10,52 GET QOCT PICTURE '999'
      @ 10,58 GET QNOV PICTURE '999'
      @ 10,64 GET QDEC PICTURE '999'
      READ
```

```
      @ 12,4 SAY "A TOTAL OF "
      STORE (QMAY+QJUN+QJUL+;
      QAUG+QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
      @ 12,15 SAY STR(TEMPSUM,3)
      @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

      DO CASE
        CASE (TEMPSUM = MLEFT)
           @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
           LEFT TO QUALIFY..."
           @ 14,53 SAY STR(TEMPSUM,3)
        CASE (MLEFT > TEMPSUM)
           @ 14,4 SAY "YOU NEED "
           STORE (MLEFT - TEMPSUM) TO NEEDED
           @ 14,13 SAY STR(NEEDED,3)
           @ 14,19 SAY "MORE QUOTAS."
        CASE (TEMPSUM > MLEFT)
           @ 14,4 SAY "YOU HAVE "
           STORE (TEMPSUM - MLEFT) TO EXTRA
           @ 14,13 SAY STR(EXTRA,3)
           @ 14,18 SAY "EXCESS QUOTAS."
        ENDCASE

    @ 15,24 SAY "SELECT ONE OPTION"
    @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
    @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
    SELECTION MENU"
    @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL;
    QUOTAS"
    ACCEPT "SELECT ONE ===> " TO WHICHWAY

    DO CASE
       CASE !(WHICHWAY) = 'B'
          STORE F TO PICKMNTH
       CASE !(WHICHWAY) = 'C'
          ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
          ORIGINAL SET OF QUOTAS (Y/N)?" TO CONTINUE
          IF CONTINUE
             DO CASE
                CASE !(MUNIT) = 'A'
                   SAVE TO A:ARNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'B'
                   SAVE TO A:BRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'C'
                   SAVE TO A:CRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'D'
                   SAVE TO A:DRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='05'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
```

```
   CASE !(MUNIT) = 'E'
      RESTORE FROM A:BNRNGQTA ADDITIVE
ENDCASE
   ERASE
   @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
   @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
   CALCULATIONS AND WILL BE SAVED"
   @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
   CURRENT QUOTAS' OPTION "
   @ 6,0 SAY "*******************************;
   ************************"
   @ 8,5 SAY "                            JUN   JUL;
   AUG   SEP   OCT   NOV   DEC"
   @ 10,28 GET QJUN PICTURE '999'
   @ 10,34 GET QJUL PICTURE '999'
   @ 10,40 GET QAUG PICTURE '999'
   @ 10,46 GET QSEP PICTURE '999'
   @ 10,52 GET QOCT PICTURE '999'
   @ 10,58 GET QNOV PICTURE '999'
   @ 10,64 GET QDEC PICTURE '999'
   READ

   @ 12,4 SAY "A TOTAL OF "
   STORE (QJUN+QJUL+;
   QAUG+QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
   @ 12,15 SAY STR(TEMPSUM,3)
   @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

   DO CASE
     CASE (TEMPSUM = MLEFT)
        @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
        LEFT TO QUALIFY..."
        @ 14,53 SAY STR(TEMPSUM,3)
     CASE (MLEFT > TEMPSUM)
        @ 14,4 SAY "YOU NEED "
        STORE (MLEFT - TEMPSUM) TO NEEDED
        @ 14,13 SAY STR(NEEDED,3)
        @ 14,19 SAY "MORE QUOTAS."
     CASE (TEMPSUM > MLEFT)
        @ 14,4 SAY "YOU HAVE "
        STORE (TEMPSUM - MLEFT) TO EXTRA
        @ 14,13 SAY STR(EXTRA,3)
        @ 14,18 SAY "EXCESS QUOTAS."
     ENDCASE

 @ 15,24 SAY "SELECT ONE OPTION"
 @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
 @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
 SELECTION MENU"
 @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL QUOTAS"
 ACCEPT "SELECT ONE ===> " TO WHICHWAY

 DO CASE
    CASE !(WHICHWAY) = 'B'
       STORE F TO PICKMNTH
    CASE !(WHICHWAY) = 'C'
       ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
       ORIGINAL SET OF QUOTAS (Y/N)?" TO CONTINUE
       IF CONTINUE
          DO CASE
             CASE !(MUNIT) = 'A'
                SAVE TO A:ARNGQTAS ALL LIKE Q???
             CASE !(MUNIT) = 'B'
                SAVE TO A:BRNGQTAS ALL LIKE Q???
             CASE !(MUNIT) = 'C'
                SAVE TO A:CRNGQTAS ALL LIKE Q???
             CASE !(MUNIT) = 'D'
                SAVE TO A:DRNGQTAS ALL LIKE Q???
             CASE !(MUNIT) = 'E'
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```
                    SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='06'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
      ERASE
      @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
      @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
      CALCULATIONS AND WILL BE SAVED"
      @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
      CURRENT QUOTAS' OPTION "
      @ 6,0 SAY "************************************;
      ************************"
      @ 8,5 SAY "                              JUL;
      AUG   SEP   OCT   NOV   DEC"
      @ 10,34 GET QJUL PICTURE '999'
      @ 10,40 GET QAUG PICTURE '999'
      @ 10,46 GET QSEP PICTURE '999'
      @ 10,52 GET QOCT PICTURE '999'
      @ 10,58 GET QNOV PICTURE '999'
      @ 10,64 GET QDEC PICTURE '999'
      READ

      @ 12,4 SAY "A TOTAL OF "
      STORE (QJUL+;
      QAUG+QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
      @ 12,15 SAY STR(TEMPSUM,3)
      @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

      DO CASE
        CASE (TEMPSUM = MLEFT)
           @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
           LEFT TO QUALIFY..."
           @ 14,53 SAY STR(TEMPSUM,3)
        CASE (MLEFT > TEMPSUM)
           @ 14,4 SAY "YOU NEED "
           STORE (MLEFT - TEMPSUM) TO NEEDED
           @ 14,13 SAY STR(NEEDED,3)
           @ 14,19 SAY "MORE QUOTAS."
        CASE (TEMPSUM > MLEFT)
           @ 14,4 SAY "YOU HAVE "
           STORE (TEMPSUM - MLEFT) TO EXTRA
           @ 14,13 SAY STR(EXTRA,3)
           @ 14,18 SAY "EXCESS QUOTAS."
        ENDCASE

    @ 15,24 SAY "SELECT ONE OPTION"
    @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
    @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
    SELECTION MENU"
```

```
    @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL QUOTAS"
    ACCEPT "SELECT ONE ===> " TO WHICHWAY

    DO CASE
       CASE !(WHICHWAY) = 'B'
          STORE F TO PICKMNTH
       CASE !(WHICHWAY) = 'C'
          ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
          ORIGINAL SET OF QUOTAS (Y/N)?"; TO CONTINUE
          IF CONTINUE
             DO CASE
                CASE !(MUNIT) = 'A'
                   SAVE TO A:ARNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'B'
                   SAVE TO A:BRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'C'
                   SAVE TO A:CRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'D'
                   SAVE TO A:DRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='07'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
      ERASE
      @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
      @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
      CALCULATIONS AND WILL BE SAVED"
      @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
      CURRENT QUOTAS' OPTION "
      @ 6,0 SAY "************************************;
      *************************"
      @ 8,5 SAY "                            ;
      AUG    SEP    OCT    NOV    DEC"
      @ 10,40 GET QAUG PICTURE '999'
      @ 10,46 GET QSEP PICTURE '999'
      @ 10,52 GET QOCT PICTURE '999'
      @ 10,58 GET QNOV PICTURE '999'
      @ 10,64 GET QDEC PICTURE '999'
      READ

      @ 12,4 SAY "A TOTAL OF "
      STORE (QAUG+QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
      @ 12,15 SAY STR(TEMPSUM,3)
      @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

      DO CASE
        CASE (TEMPSUM = MLEFT)
          @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
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           LEFT TO QUALIFY..."
           @ 14,53 SAY STR(TEMPSUM,3)
        CASE (MLEFT > TEMPSUM)
           @ 14,4 SAY "YOU NEED "
           STORE (MLEFT - TEMPSUM) TO NEEDED
           @ 14,13 SAY STR(NEEDED,3)
           @ 14,19 SAY "MORE QUOTAS."
        CASE (TEMPSUM > MLEFT)
           @ 14,4 SAY "YOU HAVE "
           STORE (TEMPSUM - MLEFT) TO EXTRA
           @ 14,13 SAY STR(EXTRA,3)
           @ 14,18 SAY "EXCESS QUOTAS."
        ENDCASE

    @ 15,24 SAY "SELECT ONE OPTION"
    @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
    @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
    SELECTION MENU"
    @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL QUOTAS"
    ACCEPT "SELECT ONE ===> " TO WHICHWAY

    DO CASE
       CASE !(WHICHWAY) = 'B'
          STORE F TO PICKMNTH
       CASE !(WHICHWAY) = 'C'
          ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
          ORIGINAL SET OF QUOTAS (Y/N)?"; TO CONTINUE
          IF CONTINUE
             DO CASE
                CASE !(MUNIT) = 'A'
                   SAVE TO A:ARNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'B'
                   SAVE TO A:BRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'C'
                   SAVE TO A:CRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'D'
                   SAVE TO A:DRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='08'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
      ERASE
      @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
      @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
      CALCULATIONS AND WILL BE SAVED"
      @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
      CURRENT QUOTAS' OPTION "
      @ 6,0 SAY "***********************************;
```

```
     *************************"
     @ 8,5 SAY "                  ;
     SEP   OCT    NOV   DEC"
     @ 10,46 GET QSEP PICTURE '999'
     @ 10,52 GET QOCT PICTURE '999'
     @ 10,58 GET QNOV PICTURE '999'
     @ 10,64 GET QDEC PICTURE '999'
     READ

     @ 12,4  SAY "A TOTAL OF "
     STORE (QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
     @ 12,15 SAY STR(TEMPSUM,3)
     @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

     DO CASE
       CASE (TEMPSUM = MLEFT)
          @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
          LEFT TO QUALIFY..."
          @ 14,53 SAY STR(TEMPSUM,3)
       CASE (MLEFT > TEMPSUM)
          @ 14,4 SAY "YOU NEED "
          STORE (MLEFT - TEMPSUM) TO NEEDED
          @ 14,13 SAY STR(NEEDED,3)
          @ 14,19 SAY "MORE QUOTAS."
       CASE (TEMPSUM > MLEFT)
          @ 14,4 SAY "YOU HAVE "
          STORE (TEMPSUM - MLEFT) TO EXTRA
          @ 14,13 SAY STR(EXTRA,3)
          @ 14,18 SAY "EXCESS QUOTAS."
       ENDCASE

    @ 15,24 SAY "SELECT ONE OPTION"
    @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
    @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
    SELECTION MENU"
    @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL QUOTAS"
    ACCEPT "SELECT ONE ===> " TO WHICHWAY

    DO CASE
       CASE !(WHICHWAY) = 'B'
          STORE F TO PICKMNTH
       CASE !(WHICHWAY) = 'C'
          ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
          ORIGINAL SET OF QUOTAS (Y/N)?" TO CONTINUE
          IF CONTINUE
             DO CASE
                CASE !(MUNIT) = 'A'
                   SAVE TO A:ARNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'B'
                   SAVE TO A:BRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'C'
                   SAVE TO A:CRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'D'
                   SAVE TO A:DRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
      ENDCASE

 ENDDO

CASE MONTH ='09'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
```

```
    RESTORE FROM A:ARNGQTAS ADDITIVE
  CASE !(MUNIT) = 'B'
    RESTORE FROM A:BRNGQTAS ADDITIVE
  CASE !(MUNIT) = 'C'
    RESTORE FROM A:CRNGQTAS ADDITIVE
  CASE !(MUNIT) = 'D'
    RESTORE FROM A:DRNGQTAS ADDITIVE
  CASE !(MUNIT) = 'E'
    RESTORE FROM A:BNRNGQTA ADDITIVE
ENDCASE
  ERASE
  @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
  @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
  CALCULATIONS AND WILL BE SAVED"
  @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
  CURRENT QUOTAS' OPTION "
  @ 6,0 SAY "**********************************;
  *************************"
  @ 8,5 SAY "                              ;
  OCT   NOV   DEC"
  @ 10,52 GET QOCT PICTURE '999'
  @ 10,58 GET QNOV PICTURE '999'
  @ 10,64 GET QDEC PICTURE '999'
  READ

  @ 12,4 SAY "A TOTAL OF "
  STORE (QOCT+QNOV+QDEC) TO TEMPSUM
  @ 12,15 SAY STR(TEMPSUM,3)
  @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

  DO CASE
    CASE (TEMPSUM = MLEFT)
      @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
      LEFT TO QUALIFY..."
      @ 14,53 SAY STR(TEMPSUM,3)
    CASE (MLEFT > TEMPSUM)
      @ 14,4 SAY "YOU NEED "
      STORE (MLEFT - TEMPSUM) TO NEEDED
      @ 14,13 SAY STR(NEEDED,3)
      @ 14,19 SAY "MORE QUOTAS."
    CASE (TEMPSUM > MLEFT)
      @ 14,4 SAY "YOU HAVE "
      STORE (TEMPSUM - MLEFT) TO EXTRA
      @ 14,13 SAY STR(EXTRA,3)
      @ 14,18 SAY "EXCESS QUOTAS."
    ENDCASE

 @ 15,24 SAY "SELECT ONE OPTION"
 @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
 @ 17,18 SAY "B...RETURN TO STANDARD REPORT;
 SELECTION MENU"
 @ 18,18 SAY "C...PERMANENTLY REPLACE ORIGINAL QUOTAS"
 ACCEPT "SELECT ONE ===> " TO WHICHWAY
 DO CASE
   CASE !(WHICHWAY) = 'B'
     STORE F TO PICKMNTH
   CASE !(WHICHWAY) = 'C'
     ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
     ORIGINAL SET OF QUOTAS (Y,/N)?" TO CONTINUE
     IF CONTINUE
       DO CASE
         CASE !(MUNIT) = 'A'
           SAVE TO A:ARNGQTAS ALL LIKE Q???
         CASE !(MUNIT) = 'B'
           SAVE TO A:BRNGQTAS ALL LIKE Q???
         CASE !(MUNIT) = 'C'
           SAVE TO A:CRNGQTAS ALL LIKE Q???
         CASE !(MUNIT) = 'D'
           SAVE TO A:DRNGQTAS ALL LIKE Q???
```

```
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='10'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
      ERASE
      @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
      @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
      CALCULATIONS AND WILL BE SAVED"
      @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
      CURRENT QUOTAS' OPTION "
      @ 6,0 SAY "*******************************;
      ***********************"
      @ 8,5 SAY "                 ;
                         NOV   DEC"
      @ 10,58 GET QNOV PICTURE '999'
      @ 10,64 GET QDEC PICTURE '999'
      READ

      @ 12,4 SAY "A TOTAL OF "
      STORE (QNOV+QDEC) TO TEMPSUM
      @ 12,15 SAY STR(TEMPSUM,3)
      @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

      DO CASE
        CASE (TEMPSUM = MLEFT)
           @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
           LEFT TO QUALIFY..."
           @ 14,53 SAY STR(TEMPSUM,3)
        CASE (MLEFT > TEMPSUM)
           @ 14,4 SAY "YOU NEED "
           STORE (MLEFT - TEMPSUM) TO NEEDED
           @ 14,13 SAY STR(NEEDED,3)
           @ 14,19 SAY "MORE QUOTAS."
        CASE (TEMPSUM > MLEFT)
           @ 14,4 SAY "YOU HAVE "
           STORE (TEMPSUM - MLEFT) TO EXTRA
           @ 14,13 SAY STR(EXTRA,3)
           @ 14,18 SAY "EXCESS QUOTAS."
        ENDCASE

    @ 15,24 SAY "SELECT ONE OPTION"
    @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
    @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
    SELECTION MENU"
    @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL;
    QUOTAS"
    ACCEPT "SELECT ONE ===> " TO WHICHWAY
```

```
    DO CASE
       CASE !(WHICHWAY) = 'B'
          STORE F TO PICKMNTH
       CASE !(WHICHWAY) = 'C'
          ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
          ORIGINAL SET OF QUOTAS (Y/N)?" TO CONTINUE
          IF CONTINUE
             DO CASE
                CASE !(MUNIT) = 'A'
                   SAVE TO A:ARNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'B'
                   SAVE TO A:BRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'C'
                   SAVE TO A:CRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'D'
                   SAVE TO A:DRNGQTAS ALL LIKE Q???
                CASE !(MUNIT) = 'E'
                   SAVE TO A:BNRNGQTA ALL LIKE Q???
             ENDCASE
             STORE F TO PICKMNTH
          ELSE
             STORE F TO PICKMNTH
          ENDIF
     ENDCASE

 ENDDO

CASE MONTH ='11'
   DO WHILE PICKMNTH = T
   DO CASE
      CASE !(MUNIT) = 'A'
         RESTORE FROM A:ARNGQTAS ADDITIVE
      CASE !(MUNIT) = 'B'
         RESTORE FROM A:BRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'C'
         RESTORE FROM A:CRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'D'
         RESTORE FROM A:DRNGQTAS ADDITIVE
      CASE !(MUNIT) = 'E'
         RESTORE FROM A:BNRNGQTA ADDITIVE
   ENDCASE
      ERASE
      @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
      @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR;
      CALCULATIONS AND WILL BE SAVED"
      @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE;
      CURRENT QUOTAS' OPTION "
      @ 6,0 SAY "************************************;
      *************************"
      @ 8,5 SAY                                  ;
      DEC"
      @ 10,64 GET QDEC PICTURE '999'
      READ

      @ 12,4 SAY "A TOTAL OF "
      STORE (QFEB+QMAR+QAPR+QMAY+QJUN+QJUL+;
      QAUG+QSEP+QOCT+QNOV+QDEC) TO TEMPSUM
      @ 12,15 SAY STR(TEMPSUM,3)
      @ 12,19 SAY "QUOTAS REMAIN FOR THE CURRENT YEAR."

      DO CASE
        CASE (TEMPSUM = MLEFT)
           @ 14,4 SAY "QUOTAS EQUAL NUMBER OF MARINES;
           LEFT TO QUALIFY..."
           @ 14,53 SAY STR(TEMPSUM,3)
        CASE (MLEFT > TEMPSUM)
           @ 14,4 SAY "YOU NEED "
           STORE (MLEFT - TEMPSUM) TO NEEDED
           @ 14,13 SAY STR(NEEDED,3)
```

```
             @ 14,19 SAY "MORE QUOTAS."
          CASE (TEMPSUM > MLEFT)
             @ 14,4 SAY "YOU HAVE "
             STORE (TEMPSUM - MLEFT) TO EXTRA
             @ 14,13 SAY STR(EXTRA,3)
             @ 14,18 SAY "EXCESS QUOTAS."
          ENDCASE

      @ 15,24 SAY "SELECT ONE OPTION"
      @ 16,18 SAY "A...START AGAIN WITH ORIGINAL QUOTAS"
      @ 17,18 SAY  "B...RETURN TO STANDARD REPORT;
      SELECTION MENU"
      @ 18,18 SAY  "C...PERMANENTLY REPLACE ORIGINAL QUOTAS"
      ACCEPT "SELECT ONE ===> " TO WHICHWAY

      DO CASE
         CASE !(WHICHWAY) = 'B'
            STORE F TO PICKMNTH
         CASE !(WHICHWAY) = 'C'
            ACCEPT "DO YOU WANT TO PERMANENTLY REPLACE THE;
            ORIGINAL SET OF QUOTAS (Y/N)?" TO CONTINUE
            IF CONTINUE
               DO CASE
                  CASE !(MUNIT) = 'A'
                     SAVE TO A:ARNGQTAS ALL LIKE Q???
                  CASE !(MUNIT) = 'B'
                     SAVE TO A:BRNGQTAS ALL LIKE Q???
                  CASE !(MUNIT) = 'C'
                     SAVE TO A:CRNGQTAS ALL LIKE Q???
                  CASE !(MUNIT) = 'D'
                     SAVE TO A:DRNGQTAS ALL LIKE Q???
                  CASE !(MUNIT) = 'E'
                     SAVE TO A:BNRNGQTA ALL LIKE Q???
               ENDCASE
               STORE F TO PICKMNTH
            ELSE
               STORE F TO PICKMNTH
            ENDIF
       ENDCASE

   ENDDO

 CASE MONTH ='12'
     ERASE
     @ 2,15 SAY "RIFLE RANGE QUOTA SCRATCH PAD"
     @ 4,5 SAY "SPACE BELOW THIS LINE IS FOR CALCULATIONS;
     AND WILL BE SAVED"
     @ 5,5 SAY "ONLY IF YOU SPECIFY THE 'REPLACE CURRENT;
     QUOTAS' OPTION "
     @ 6,0 SAY "*****************************************;
     *************"
     @ 8,5 SAY "THIS IS THE LAST MONTH OF THE CURRENT;
     YEAR."
 ENDCASE

ENDCASE

SET COLON ON
RELEASE ALL LIKE Q???
RELEASE MLEFT,TEMPSUM,WHICHWAY,PICKMNTH,CONTINUE
RETURN
```

M. MARKSMANSHIP ROSTER ROUTINE

```
* ROUTINE NAME: MKSRCST.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.7.0
* AUTHOR: R.E. PRUIETT
* DATE: 28DEC83
* VARIABLES USED: MUNIT, MPLAT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: NONE
* VARIABLES RELEASED: MUNIT, MPLAT
* FILES OPENED/CLOSED: PERS, QUAL (ALL FILES CLOSED)
* TEMP FILES CREATED: MRKSDATA (CREATED AND DELETED)
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: THIS ROUTINE CREATES A TEMPORARY FILE WHICH
* INCLUDES NAME, RFLQUAL, RFLDATE, PSTQUAL, PSTDATE FOR
* EACH MEMBER IN THE SELECTED UNIT.  A STANDARD REPORT
* FORMAT (B:MRKSRPT) IS USED TO DISPLAY THE "MARKSMANSHIP
* ROSTER REPORT".
*
USE PERS
SELECT SECONDARY
USE QUAL
JOIN TO MRKSDATA FOR P.SSN = S.SSN FIELD;
NAME,RFLQUAL,RFLDATE,PSTQUAL,PSTDATE
USE MRKSDATA
ERASE
DO CASE
    CASE !(MUNIT) = 'A'
        REPORT FORM B:MRKSRPT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
        REPORT FORM B:MRKSRPT FOR COMPANY = ONECO
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
        REPORT FORM B:MRKSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = ONEPLT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
        REPORT FORM B:MRKSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = TWOPLT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
        REPORT FORM B:MRKSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = THREEPLT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
        REPORT FORM B:MRKSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = FOURPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
        REPORT FORM B:MRKSRPT FOR COMPANY = TWOCO
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
        REPORT FORM B:MRKSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = ONEPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
        REPORT FORM B:MRKSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = TWOPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
        REPORT FORM B:MRKSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = THREEPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
        REPORT FORM B:MRKSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = FOURPLT
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
        REPORT FORM B:MRKSRPT FOR COMPANY = THREECO
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
        REPORT FORM B:MRKSRPT FOR COMPANY = THREECO .AND.;
        PLATOON = ONEPLT
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
        REPORT FORM B:MRKSRPT FOR COMPANY = THREECO .AND.;
        PLATOON = TWOPLT
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
        REPORT FORM B:MRKSRPT FOR COMPANY = THREECO .AND.;
```

```
      PLATOON = THREEPLT
   CASE ! (MUNIT) = 'D' .AND. !(MPLAT) = 'E'
      REPORT FORM B:MRKSRPT FOR COMPANY = THREECO .AND.;
      PLATOON = FOURPLT
   CASE ! (MUNIT) = 'E' .AND. !(MPLAT) = 'A'
      REPORT FORM B:MRKSRPT FOR COMPANY = FOURCO
   CASE ! (MUNIT) = 'E' .AND. !(MPLAT) = 'B'
      REPORT FORM B:MRKSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = ONEPLT
   CASE ! (MUNIT) = 'E' .AND. !(MPLAT) = 'C'
      REPORT FORM B:MRKSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = TWOPLT
   CASE ! (MUNIT) = 'E' .AND. !(MPLAT) = 'D'
      REPORT FORM B:MRKSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = THREEPLT
   CASE ! (MUNIT) = 'E' .AND. !(MPLAT) = 'E'
      REPORT FORM B:MRKSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = FOURPLT
ENDCASE
USE
RELEASE MUNIT, MPLAT
DELETE FILE MRKSDATA
RETURN
```

N. MOS STATUS ROUTINE

```
* ROUTINE NAME: MOSSTAT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.8.0
* AUTHOR: R.E. PRUIETT
* DATE: 6NOV83
* VARIABLES USED: ONECO, TWOCO, THREECO, FOURCO, ONEPLT,
* TWOPLT, THREEPLT, FOURPLT, MUNIT, MPLAT, UNITNAME,
* PLATNAME
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: COUNT, MOS, RK, PROCEED
* VARIABLES RELEASED: PROCEED, ROW, RK, COUNT, UNITNAME,
* PLATNAME
* FILES OPENED/CLOSED: A:PERS INDEX A:MOSNDX (ALL FILES
* CLOSED)
* TEMP FILES CREATED: NONE
* USING ROUTINES: STDRPT.PRG
* DESCRIPTION: THIS ROUTINE PRODUCES THE "MOS STATUS
* REPORT". EACH TYPE OF MOS IN THE SPECIFIED UNIT IS
* COUNTED AND TOTALED, REGARDLESS OF THE TYPE OR NUMBER OF
* DIFFERENT MOS'S IN THE PARTICULAR UNIT. THE RESULTS ARE
* THEN DISPLAYED BY MOS AND BY RANK.
*
ERASE
DO CVRTUNIT
USE A:PERS INDEX A:MOSNDX
@ 0,20 SAY "MOS STATUS REPORT"
IF !(MUNIT)='E'
   @ 0,38 SAY "BATTALION"
ENDIF
IF !(MUNIT)<> 'E'
   @ 0,38 SAY UNITNAME
ENDIF
IF !(MPLAT)<> 'E'.AND. !(MUNIT)<> 'E'
   @ 0,46 SAY PLATNAME
ENDIF
@ 2,10 SAY "MOS"
@ 2,30 SAY "RANK"
@ 2,55 SAY "TOTAL"
STORE 4 TO ROW
DO WHILE .NOT. EOF
   STORE PRIMEMOS TO MOS
   STORE RANK TO RK
   STORE 0 TO COUNT
   DO CASE
      CASE !(MUNIT)='E'
         DO WHILE PRIMEMOS=MOS .AND. RANK=RK .AND. .NOT.;
         EOF
            STORE COUNT+1 TO COUNT
            SKIP
         ENDDO
      CASE !(MPLAT)='E'
         DO WHILE PRIMEMOS=MOS .AND. RANK=RK .AND. .NOT.;
         EOF
            IF COMPANY=UNITNAME
               STORE COUNT+1 TO COUNT
            ENDIF
            SKIP
         ENDDO
      OTHERWISE
         DO WHILE PRIMEMOS=MOS .AND. RANK=RK .AND. .NOT.;
         EOF
            IF COMPANY=UNITNAME .AND. PLATOON=PLATNAME
               STORE COUNT+1 TO COUNT
            ENDIF
            SKIP
         ENDDO
```

```
   ENDCASE
   IF COUNT > 0
      @ ROW,10 SAY MOS
      @ ROW,30 SAY RK
      @ ROW,50 SAY COUNT
      STORE ROW+2 TO ROW
   ENDIF
   IF ROW > 20
      @ 23,0
      ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
      ERASE
      STORE 4 TO ROW
      @ 0,20 SAY "MOS STATUS REPORT"
      IF !(MUNIT)='B'
         @ 0,38 SAY "BATTALION"
      ENDIF
      IF !(MUNIT)<> 'B'
         @ 0,38 SAY UNITNAME
      ENDIF
      IF !(MPLAT)<> 'B'.AND. !(MUNIT) <> 'B'
         @ 0,46 SAY PLATNAME
      ENDIF
      @ 2,10 SAY "MOS"
      @ 2,30 SAY "RANK"
      @ 2,55 SAY "TOTAL"
   ENDIF
ENDDO
RELEASE PROCEED,ROW,MOS,RK,COUNT,UNITNAME,PLATNAME
USE
RETURN
```

C. MOS ROSTER ROUTINE

```
* ROUTINE NAME: MOSROST.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.9.0
* AUTHOR: R. E. PRUIETT
* DATE: 6NOV83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO, ONEPLT, TWOPLT, THREEPLT, FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: NONE
* VARIABLES RELEASED: MUNIT, MPLAT
* FILES (OPENED/CLOSED): A:PERS INDEX A:MOSNDX
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: THIS IS A CONTROL ROUTINE WHICH CREATES THE
* PERSONNEL ROSTER FOR THE UNIT SPECIFIED BY THE USER'S
* RESPONSE TO THE SLCTUNIT MENU(5.1.0).
ERASE
USE A:PERS INDEX A:MOSNDX
DO CASE
    CASE !(MUNIT) = 'E'
        REPORT FORM B:MOSRPT
    CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
        REPORT FORM B:MOSRPT FOR COMPANY = ONECO
    CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
        REPORT FORM B:MOSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = ONEPLT
    CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
        REPORT FORM B:MOSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = TWOPLT
    CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
        REPORT FORM B:MOSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = THREEPLT
    CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
        REPORT FORM B:MOSRPT FOR COMPANY = ONECO .AND.;
        PLATOON = FOURPLT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
        REPORT FORM B:MOSRPT FOR COMPANY = TWOCO
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
        REPORT FORM B:MOSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = ONEPLT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
        REPORT FORM B:MOSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = TWOPLT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
        REPORT FORM B:MOSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = THREEPLT
    CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
        REPORT FORM B:MOSRPT FOR COMPANY = TWOCO .AND.;
        PLATOON = FOURPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
        REPORT FORM B:MOSRPT FOR COMPANY = THREECO
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
        REPORT FORM B:MOSRPT FOR COMPANY = THREECO .AND.;
        PLATOON = ONEPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
        REPORT FORM B:MOSRPT FOR COMPANY = THREECO .AND.;
        PLATOON = TWOPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
        REPORT FORM B:MOSRPT FOR COMPANY = THREECO .AND.;
        PLATOON = THREEPLT
    CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
        REPORT FORM B:MOSRPT FOR COMPANY = THREECO .AND.;
        PLATOON = FOURPLT
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
        REPORT FORM B:MOSRPT FOR COMPANY = FOURCO
    CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
```

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      REPORT FORM B:MCSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = ONEPLT
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
      REPORT FORM B:MCSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = TWOPLT
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
      REPORT FORM B:MCSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = THREEPLT
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
      REPORT FORM B:MCSRPT FOR COMPANY = FOURCO .AND.;
      PLATOON = FOURPLT
ENDCASE
USE
RELEASE MUNIT, MPLAT
RETURN
```

E. PERSONNEL DATA ROUTINE

```
* ROUTINE NAME: PERSDATA.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.10.0
* AUTHOR: R. E. PRUIETT
* DATE: 21NOV83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO, ONEPLT, TWOPLT, THREEPLT, FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: COUNT, PROCEED
* VARIABLES RELEASED: COUNT, PROCEED
* FILES (OPENED/CLOSED): A:PERS INDEX A:ALPHPERS
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: THIS IS A CONTROL ROUTINE WHICH CREATES THE
* PERSONNEL ROSTER FOR THE UNIT SPECIFIED BY THE USER'S
* RESPONSE TO THE SLCTUNIT MENU(5.1.0).

ERASE
USE A:PERS INDEX A:ALPHPERS
GOTO TOP
STORE 0 TO COUNT
DO WHILE .NOT. EOF
DO CASE
   CASE !(MUNIT) = 'E'
      DO PERSRPT
      STORE COUNT + 1 TO COUNT
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
      IF COMPANY = ONECO
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
      IF COMPANY = ONECO .AND. PLATOON = ONEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
      IF COMPANY = ONECO .AND. PLATOON = TWOPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
      IF COMPANY = ONECO .AND. PLATOON = THREEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
      IF COMPANY = ONECO .AND. PLATOON = FOURPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
      IF COMPANY = TWOCO
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
      IF COMPANY = TWOCO .AND. PLATOON = ONEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
      IF COMPANY = TWOCO .AND. PLATOON = TWOPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
```

```
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
      IF COMPANY = TWOCO .AND. PLATOON = THREEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
      IF COMPANY = TWOCO .AND. PLATOON = FOURPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
      IF COMPANY = THREECO
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
      IF COMPANY = THREECO .AND. PLATOON = ONEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
      IF COMPANY = THREECO .AND. PLATOON = TWOPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
      IF COMPANY = THREECO .AND. PLATOON = THREEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
      IF COMPANY = THREECO .AND. PLATOON = FOURPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
      IF COMPANY = FOURCO
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
      IF COMPANY = FOURCO .AND. PLATOON = ONEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
      IF COMPANY = FOURCO .AND. PLATOON = TWOPLT
      DO PERSRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
      IF COMPANY = FOURCO .AND. PLATOON = THREEPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
      IF COMPANY = FOURCO .AND. PLATOON = FOURPLT
         DO PERSRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
ENDCASE
IF COUNT = 4
   @ 22,0
   ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
   STORE 0 TO COUNT
   ERASE
ENDIF
SKIP
ENDDO
```

```
RELEASE COUNT, PROCEED
USE
RETURN
```

Q. PERSONNEL DATA FORMAT ROUTINE

```
* ROUTINE NAME: PERSRPT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.10.1.0
* DATE:21NOV83
* VARIABLES USED: COUNT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: NONE
* VARIABLES RELEASED: NONE
* FILES (OPENED/CLOSED): NONE
* USING SUBROUTINES: PERSDATA.PRG
* DESCRIPTION: THIS IS A REPORT FORMAT COMMAND FILE WHICH
* DISPLAYS THE FORMAT FOR THE PERSONAL DATA REPORT AND GETS
* THE FIELD VARIABLES FROM THE PERS.DBF WHICH IS OPENED AND
* CLOSED IN PERSDATA.PRG.
*
@ COUNT * 6,0 SAY "NAME "
@ $,5 SAY NAME
@ $,42 SAY " SSN "
@ $,47 SAY SSN
@ $+1,0 SAY "RANK "
@ $,5 SAY RANK
@ $,20 SAY " PRIMARY MOS "
@ $,33 SAY PRIMEMOS
@ $,42 SAY " SECONDARY MOS "
@ $,70 SAY SECMOS
@ $+1,0 SAY "COMPANY "
@ $,8 SAY COMPANY
@ $,20 SAY " PLATOON "
@ $,30 SAY PLATOON
@ $,42 SAY " JOIN DATE "
@ $,53 SAY JOINDATE
@ $,62 SAY " EAS "
@ $,67 SAY EAS
@ $+1,0 SAY "BIRTHDATE"
@ $,10 SAY BRTHDATE
@ $,20 SAY " HEIGHT"
@ $,28 SAY HEIGHT
@ $,42 SAY " WEIGHT"
@ $,50 SAY WEIGHT
@ $,62 SAY " COMMENTS:"
@ $,73 SAY COMMENT
RETURN
```

B. EST STATUS ROUTINE

```
* ROUTINE NAME: ESTSTAT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.11.0
* AUTHOR: R. E. PRUIETT
* DATE: 22DEC83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO,ONEPLT, TWOPLT, THREEPLT, FOURPLT, ZZTOTAL, ZZCOC,
* ZZHIS, ZZCOD, ZZINT, ZZAID, ZZUNI, ZZNBC, ZZMKS, ZZTAC,
* ZZPFT1, ZZPFT2
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED:  PROCEED
* VARIABLES RELEASED: ZZ??????
* FILES (OPENED/CLOSED): B:EST, A:PERS (ALL FILES CLOSED)
* TEMP FILES CREATED: TEMP (CREATED AND DELETED)
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: THIS ROUTINE CREATES A TEMPORARY FILE THAT
* INCLUDES THE ALL ESSENTIAL SUBJECT AND PFT FIELDS FROM
* THE EST.DBF FOR MEMBERS IN A USER SPECIFIED UNIT.  FROM
* THIS FILE IT COUNTS THE TOTAL NUMBER OF UNIT MEMBERS THAT
* HAVE COMPLETED ALL ELEMENTS IN EACH TRAINING CATEGORY.
* THE "EST STATUS REPORT" IS DISPLAYED WHICH INCLUDES
* TOTALS FOR EACH TRAINING CATEGORY AND THE PERCENTAGE
* COMPLETED FOR EACH TRAINING CATEGORY.

ERASE
DO CASE
   CASE !(MUNIT) = 'B'
       USE B:EST
       DO CNTEST
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY=ONECO .AND. P.SSN=SSN);
       FIELDS COC,HIS,COD,INT,AID,UNI,PFT1CLSS,PFT2CLSS,
       NBC,MKS,TAC
       USE TEMP
       DO CNTEST
       DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON =;
       ONEPLT .AND. P.SSN=SSN) FIELDS COC,HIS,COD,INT,AID,;
       UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTEST
       DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
       SELECT PRIMARY
       USE A:PERS
       SELECT SECONDARY
       USE B:EST
       SELECT PRIMARY
       JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON;
       =TWOPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
       AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
       USE TEMP
       DO CNTEST
       DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
```

```
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON;
      = THREEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
      INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =ONECO .AND. P.PLATOON;
      =FOURPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY=TWOCO .AND. P.SSN=SSN);
      FIELDS COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
      PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
      ONEPLT .AND. P.SSN=SSN) FIELDS COC,HIS,COD,INT,AID,;
      UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON;
      =TWOPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON;
      =THREEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
      INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
```

```
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =TWOCO .AND. P.PLATOON =;
      FOURPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.SSN=;
      S.SSN) FIELDS COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
      PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
      = ONEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY=THREECO .AND. P.PLATOON;
      = TWOPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =THREECO .AND. P.PLATOON;
      =THREEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY=THREECO .AND. P.PLATOON;
```

```
      = FOURPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
      HIS,COD,INT,AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND.;
      P.SSN=SSN) FIELDS COC,HIS,COD,INT,AID,UNI,PFT1CLSS,;
      PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
      =ONEPLT .AND. ONEPLT .AND. P.SSN=S.SSN) FIELDS COC,;
      HIS,COD,INT,AID,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
      =TWOPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
     USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
      = THREEPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,;
      INT,AID,UNI,PFT1CLSS,;
      PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
      SELECT PRIMARY
      USE A:PERS
      SELECT SECONDARY
      USE B:EST
      SELECT PRIMARY
      JOIN TO TEMP FOR (P.COMPANY =FOURCO .AND. P.PLATOON;
      =FOURPLT .AND. P.SSN=S.SSN) FIELDS COC,HIS,COD,INT,;
      AID,UNI,PFT1CLSS,PFT2CLSS,NBC,MKS,TAC
      USE TEMP
      DO CNTEST
      DELETE FILE TEMP
ENDCASE
@ 0,25 SAY "EST STATUS REPORT"
@ 2,0 SAY "CODE OF CONDUCT..."
```

```
@ 2,25 SAY (ZZTOTAL-ZZCOC)/ZZTOTAL*100 USING '999'
@ 2,30 SAY "PERCENT COMPLETED ..."
@ 2,52 SAY ZZTOTAL-ZZCOC USING '999'
@ 4,0 SAY "MARINE CORPS HISTORY..."
@ 4,25 SAY (ZZTOTAL-ZZHIS)/ZZTOTAL*100 USING '999'
@ 4,30 SAY "PERCENT COMPLETED ..."
@ 4,52 SAY ZZTOTAL-ZZHIS USING '999'
@ 6,0 SAY "CLOSE ORDER DRILL..."
@ 6,25 SAY (ZZTOTAL-ZZCOD)/ZZTOTAL*100 USING '999'
@ 6,30 SAY "PERCENT COMPLETED ..."
@ 6,52 SAY ZZTOTAL-ZZCOD USING '999'
@ 8,0 SAY "INTERIOR GUARD..."
@ 8,25 SAY (ZZTOTAL-ZZINT)/ZZTOTAL*100 USING '999'
@ 8,30 SAY "PERCENT COMPLETED ..."
@ 8,52 SAY ZZTOTAL-ZZINT USING '999'
@ 10,0 SAY "FIRST AID..."
@ 10,25 SAY (ZZTOTAL-ZZAID)/ZZTOTAL*100 USING '999'
@ 10,30 SAY "PERCENT COMPLETED ..."
@ 10,52 SAY ZZTOTAL-ZZAID USING '999'
@ 12,0 SAY "EQUIPMENT/UNIFORMS..."
@ 12,25 SAY (ZZTOTAL-ZZUNI)/ZZTOTAL*100 USING '999'
@ 12,30 SAY "PERCENT COMPLETED ..."
@ 12,52 SAY ZZTOTAL-ZZUNI USING '999'
@ 14,0 SAY "NBC..."
@ 14,25 SAY (ZZTOTAL-ZZNBC)/ZZTOTAL*100 USING '999'
@ 14,30 SAY "PERCENT COMPLETED ..."
@ 14,52 SAY ZZTOTAL-ZZNBC USING '999'
@ 16,0 SAY "MARKSMANSHIP..."
@ 16,25 SAY (ZZTOTAL-ZZMKS)/ZZTOTAL*100 USING '999'
@ 16,30 SAY "PERCENT COMPLETED ..."
@ 16,52 SAY ZZTOTAL-ZZMKS USING '999'
@ 18,0 SAY "INDIVID TAC MEASURES..."
@ 18,25 SAY (ZZTOTAL-ZZTAC)/ZZTOTAL*100 USING '999'
@ 18,30 SAY "PERCENT COMPLETED ..."
@ 18,52 SAY ZZTOTAL-ZZTAC USING '999'
@ 20,0 SAY "PFT1..."
@ 20,24 SAY ((ZZTOTAL-ZZPFT1)/ZZTOTAL)*100 USING '999'
@ 20,31 SAY "PERCENT COMPLETED PFT ONE..."
@ 20,62 SAY (ZZTOTAL-ZZPFT1) USING '999'
@ 22,0 SAY "PFT2..."
@ 22,24 SAY ((ZZTOTAL-ZZPFT2)/ZZTOTAL)*100 USING '999'
@ 22,31 SAY "PERCENT COMPLETED PFT TWO..."
@ 22,62 SAY (ZZTOTAL-ZZPFT2) USING '999'
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
RELEASE ALL LIKE ZZ??????
USE
RETURN
```

S. EST COUNT ROUTINE

```
* ROUTINE NAME: CNTEST.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.11.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 12DEC83
* VARIABLES USED: ZZTOTAL, ZZCOC, ZZHIS, ZZCOD, ZZINT,
* ZZAID, ZZUNI, ZZNBC, ZZMKS, ZZTAC, ZZPFT1, ZZPFT2
* VARIABLES MODIFIED:
* VARIABLES CREATED: NONE
* VARIABLES RELEASED: NONE
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: ESTSTAT.PRG
* DESCRIPTION: THIS IS A SIMPLE ROUTINE THAT COUNTS THE
* TOTAL TRAINING CATEGORIES THAT INCLUDE A "*" (I.E. COUNTS
* THE NUMBER OF TRAINING CATEGORIES THAT CURRENTLY INCLUDE
* ONE OR MORE TRAINING ELEMENTS THAT HAVE NOT BEEN
* COMPLETED.
*
COUNT TO ZZTOTAL
COUNT FOR '*'$(COC) TO ZZCOC
COUNT FOR '*'$(HIS) TO ZZHIS
COUNT FOR '*'$(COD) TO ZZCOD
COUNT FOR '*'$(INT) TO ZZINT
COUNT FOR '*'$(AID) TO ZZAID
COUNT FOR '*'$(UNI) TO ZZUNI
COUNT FOR '*'$(NEC) TO ZZNBC
COUNT FOR '*'$(MKS) TO ZZMKS
COUNT FOR '*'$(TAC) TO ZZTAC
COUNT FOR '*'$(PFT1CLSS) TO ZZPFT1
COUNT FOR '*'$(PFT2CLSS) TO ZZPFT2
RETURN
```

I. EST ROSTER ROUTINE

```
* ROUTINE NAME: ESTROST.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.12.0
* AUTHOR: R. E. PRUIETT
* DATE: 20DEC83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO, ONEPLT, TWOPLT, THREEPLT, FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: COUNT, PROCEED
* VARIABLES RELEASED: COUNT, PROCEED
* FILES (OPENED/CLOSED): A:PERS INDEX A:ALPHPERS, B:EST
* INDEX B:ESTSSN (ALL FILES ARE CLOSED).
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: THIS IS A CONTROL ROUTINE WHICH CREATES THE
* PERSONNEL ROSTER FOR THE UNIT SPECIFIED BY THE USER'S
* RESPONSE TO THE SLCTUNIT MENU(5.1.0).

ERASE
SELECT PRIMARY
USE A:PERS INDEX A:ALPHPERS
SELECT SECONDARY
USE B:EST INDEX B:ESTSSN
SELECT PRIMARY
GOTO TOP
STORE 0 TO COUNT
DO WHILE .NOT. EOF
DO CASE
   CASE !(MUNIT) = 'B'
      DO ESTRPT
      STORE COUNT + 1 TO COUNT
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'B'
      IF COMPANY = ONECO
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
      IF COMPANY = ONECO .AND. PLATOON = ONEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
      IF COMPANY = ONECO .AND. PLATOON = TWOPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
      IF COMPANY = ONECO .AND. PLATOON = THREEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
      IF COMPANY = ONECO .AND. PLATOON = FOURPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
      IF COMPANY = TWOCO
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
      IF COMPANY = TWOCO .AND. PLATOON = ONEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
```

```
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
      IF COMPANY = TWOCO .AND. PLATOON = TWOPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
      IF COMPANY = TWOCO .AND. PLATOON = THREEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
      IF COMPANY = TWOCO .AND. PLATOON = FOURPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
      IF COMPANY = THREECO
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
      IF COMPANY = THREECO .AND. PLATOON = ONEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
      IF COMPANY = THREECO .AND. PLATOON = TWOPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
      IF COMPANY = THREECO .AND. PLATOON = THREEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
      IF COMPANY = THREECO .AND. PLATOON = FOURPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
      IF COMPANY = FOURCO
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
      IF COMPANY = FOURCO .AND. PLATOON = ONEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
      IF COMPANY = FOURCO .AND. PLATOON = TWOPLT
      DO ESTRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
      IF COMPANY = FOURCO .AND. PLATOON = THREEPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
      IF COMPANY = FOURCO .AND. PLATOON = FOURPLT
         DO ESTRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
ENDCASE
IF COUNT = 4
   @ 22,0
   ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
```

```
   STORE 0 TO COUNT
   ERASE
ENDIF
SELECT PRIMARY
SKIP
ENDDO
RELEASE COUNT,PROCEED
USE
RETURN
```

U. EST REPORT FORMAT ROUTINE

```
* ROUTINE NAME: ESTREPT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.12.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 14NOV83
* VARIABLES USED: NONE
* VARIABLES MODIFIED:NONE
* VARIABLES CREATED: ROW, MSSN
* VARIABLES RELEASED:ROW
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: ESTROST.PRG
* DESCRIPTION: THIS ROUTINE USES. FORMATS AND
* DISPLAYS THE EST ROSTER REPORT.
STORE (COUNT * 6) TO ROW
@ ROW,0 SAY NAME
@ ROW,30 SAY RANK
@ ROW,33 SAY COMPANY
STORE SSN TO MSSN
SELECT SECONDARY
FIND &MSSN
@ ROW + 1,0 SAY "CODE OF CONDUCT "
@ ROW + 1,16 SAY COC
@ ROW + 1,22 SAY "MARCOR HIS "
@ ROW + 1,35 SAY HIS
@ ROW + 1,43 SAY "MARKSMANSHIP "
@ ROW + 1,56 SAY MKS
@ ROW + 1,67 SAY "DRILL "
@ ROW + 1,74 SAY COD
@ ROW + 2,0 SAY "INTERIOR GUARD "
@ ROW + 2,16 SAY INT
@ ROW + 2,22 SAY "MARKSMANSHIP "
@ ROW + 2,35 SAY MKS
@ ROW + 2,43 SAY "TAC MEASURES "
@ ROW + 2,56 SAY TAC
@ ROW + 2,67 SAY "NBC "
@ ROW + 2,74 SAY NBC
@ ROW + 3,0 SAY "PFT1 "
@ ROW + 3,6 SAY PFT1CLSS
@ ROW + 3,10 SAY "PFT2 "
@ ROW + 3,16 SAY PFT2CLSS
@ ROW + 3,22 SAY "EQUIP/UNIFORM "
@ ROW + 3,36 SAY UNI
@ ROW + 3,43 SAY "FIRST AID "
@ ROW + 3,54 SAY AID
RELEASE ROW
RETURN
```

V. SWIM QUALIFICATION ROUTINE

```
* ROUTINE NAME: SWIMQUAL.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.13.0
* AUTHOR: R. E. PRUITT
* DATE: 20DEC83
* VARIABLES USED: MUNIT, MPLAT, ONECO, TWOCO, THREECO,
* FOURCO, ONEPLT, TWOPLT, THREEPLT, FOURPLT
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: PROCEED, COUNT, S1TOTAL, S2TOTAL,
* S3TOTAL, UQTOTAL
* VARIABLES RELEASED: COUNT, PROCEED, MSSN, S1TOTAL,
* S2TOTAL, S3TOTAL, UQTOTAL, ROW
* FILES (OPENED/CLOSED): A:PERS INDEX A:ALPHPERS
* TEMP FILES CREATED: NONE
* USING SUBROUTINES: STDRPT.PRG
* DESCRIPTION: THIS ROUTINE DISPLAYS THE SWIM QUAL REPORT
* FOR THE SELECTED UNIT.  THE SWIM QUAL REPORT CONSIST OF
* EACH MARINES NAME,RANK, UNIT NAME, AND SWIMMING
* QUALIFICATION STATUS.  AT THE END OF THE REPORT, SUMMARY
* DATA IS DISPLAYED WHICH INCLUDES THE TOTALS FOR EACH
* QUALIFICATION CATEGORY AND THE OVERALL TOTAL FOR THE
* UNIT.

ERASE
@ 12,27 SAY "SWIM QUALIFICATION REPORT"
@ 22,0
ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
ERASE
SELECT PRIMARY
USE A:PERS INDEX A:ALPHPERS
GOTO TOP
STORE 0 TO S1TOTAL
STORE 0 TO S2TOTAL
STORE 0 TO S3TOTAL
STORE 0 TO UQTOTAL
STORE 0 TO COUNT
DO WHILE .NOT. EOF
DO CASE
   CASE !(MUNIT) = 'E'
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
   CASE !(MUNIT) = 'A'.AND. !(MPLAT) = 'E'
      IF COMPANY = ONECO
         DO SWIMRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'A'
      IF COMPANY = ONECO .AND. PLATOON = ONEPLT
         DO SWIMRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'B'
      IF COMPANY = ONECO .AND. PLATOON = TWOPLT
         DO SWIMRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'C'
      IF COMPANY = ONECO .AND. PLATOON = THREEPLT
         DO SWIMRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
   CASE !(MUNIT) = 'A' .AND. !(MPLAT) = 'D'
      IF COMPANY = ONECO .AND. PLATOON = FOURPLT
         DO SWIMRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
```

```
CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'E'
   IF COMPANY = TWOCO
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'A'
   IF COMPANY = TWOCO .AND. PLATOON = ONEPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'B'
   IF COMPANY = TWOCO .AND. PLATOON = TWOPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'C'
   IF COMPANY = TWOCO .AND. PLATOON = THREEPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'B' .AND. !(MPLAT) = 'D'
   IF COMPANY = TWOCO .AND. PLATOON = FOURPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'E'
   IF COMPANY = THREECO
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'A'
   IF COMPANY = THREECO .AND. PLATOON = ONEPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'B'
   IF COMPANY = THREECO .AND. PLATOON = TWOPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'C'
   IF COMPANY = THREECO .AND. PLATOON = THREEPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'C' .AND. !(MPLAT) = 'D'
   IF COMPANY = THREECO .AND. PLATOON = FOURPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'E'
   IF COMPANY = FOURCO
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'A'
   IF COMPANY = FOURCO .AND. PLATOON = ONEPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
      ENDIF
CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'B'
   IF COMPANY = FOURCO .AND. PLATOON = TWOPLT
   DO SWIMRPT
   STORE COUNT + 1 TO COUNT
   ENDIF
CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'C'
   IF COMPANY = FOURCO .AND. PLATOON = THREEPLT
      DO SWIMRPT
      STORE COUNT + 1 TO COUNT
```

```
         ENDIF
   CASE !(MUNIT) = 'D' .AND. !(MPLAT) = 'D'
       IF COMPANY = FOURCO .AND. PLATOON = FOURPLT
         DO SWIMRPT
         STORE COUNT + 1 TO COUNT
         ENDIF
ENDCASE
IF COUNT = 7
   @ 22,0
   ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
   STORE 0 TO COUNT
   ERASE
ENDIF
SELECT PRIMARY
SKIP
ENDDO
@ 22,0
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
ERASE
@ 2,20 SAY "SUMMARY DATA"
@ 4,1 SAY "SWIM QUALIFICATION"
@ 4,25 SAY "TOTAL"
@ 6,1 SAY "S1"
@ 6,25 SAY S1TOTAL USING '999'
@ 7,1 SAY "S2"
@ 7,25 SAY S2TOTAL USING '999'
@ 8,1 SAY "S3"
@ 8,25 SAY S3TOTAL USING '999'
@ 9,1 SAY "UNQUALIFIED"
@ 9,25 SAY UQTOTAL USING '999'
@ 10,25 SAY "         "
@ 12,25 SAY S1TOTAL+S2TOTAL+S3TOTAL+UQTOTAL USING '9999'
@ 22,0
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
RELEASE COUNT,PROCEED, MSSN,S1TOTAL,S3TOTAL,;
UQTOTAL,ROW
USE
RETURN
```

W. SWIM REPORT ROUTINE

```
* ROUTINE NAME: SWIMRPT.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.13.1.0
* AUTHOR: R.E. PRUIETT
* DATE: 12DEC83
* VARIABLES USED:NONE
* VARIABLES MODIFIED:NONE
* VARIABLES CREATED:ROW, MSSN, S1TOTAL, S2TOTAL, S3TOTAL,
* UQTOTAL
* VARIABLES RELEASED:NONE
* FILES OPENED/CLOSED:QUAL INDEX QUALSSN
* TEMP FILES CREATED:NONE
* USING SUBROUTINES: SWIMQUAL.PRG
* DESCRIPTION: THIS ROUTINE COUNTS AND STORES THE NUMBER OF
* PERSONNEL IN THE SELECTED UNIT THAT ARE IN EACH SWIMMING
* QUALIFICATION CATEGORY.

STORE (COUNT * 3) TO ROW
@ ROW,0 SAY NAME
@ ROW,30 SAY RANK
@ ROW,33 SAY COMPANY
STORE SSN TO MSSN
SELECT SECONDARY
USE B:QUAL INDEX B:QUALSSN
FIND &MSSN
@ ROW+1,0 SAY "SWIM QUAL "
@ ROW+1,10 SAY SWIMQUAL
DO CASE
   CASE SWIMQUAL='S1'
      STORE S1TOTAL + 1 TO S1TOTAL
   CASE SWIMQUAL='S2'
      STORE S2TOTAL + 1 TO S2TOTAL
   CASE SWIMQUAL='S3'
      STORE S3TOTAL + 1 TO S3TOTAL
   CASE SWIMQUAL='UQ'
      STORE UQTOTAL + 1 TO UQTOTAL
ENDCASE
RETURN
```

I. HELP ROUTINE

```
* ROUTINE NAME: HELP.PRG
* MODULE NAME: STANDARD REPORT GENERATOR
* VERSION: 5.14.0
* AUTHOR: R.E. PRUIETT
* DATE: 18JAN84
* VARIABLES USED: NONE
* VARIABLES MODIFIED: NONE
* VARIABLES CREATED: HELOPT, PROCEED
* VARIABLES RELEASED: NONE
* FILES OPENED/CLOSED: NONE
* TEMP FILES CREATED: NONE
* USING ROUTINES: STDRPT
* DESCRIPTION: THIS ROUTINE PROVIDES A FUNCTIONAL
* DESCRIPTION OF  EACH REPORT LISTED IN THE STANDARD REPORT
* SELECTION  MENU.

ERASE
@ 2,35 SAY "HELP MENU"
@ 3,35 SAY "---- ----"
@ 5,20 SAY "A...HELP UNIT ROSTER"
@ 6,20 SAY "B...HELP TRAINING STATUS REPORT"
@ 7,20 SAY "C...HELP TRAINING ROSTER REPORT"
@ 8,20 SAY "D...HELP INDIVIDUAL TRAINING RECORD"
@ 9,20 SAY "E...HELP MARKSMANSHIP STATUS REPORT"
@ 10,20 SAY "F...HELP MARKSMANSHIP ROSTER REPORT"
@ 11,20 SAY "G...HELP MOS STATUS REPORT"
@ 12,20 SAY "H...HELP MOS ROSTER REPORT"
@ 13,20 SAY "I...HELP PERSONAL DATA REPORT"
@ 14,20 SAY "J...HELP EST STATUS REPORT"
@ 15,20 SAY "K...HELP EST ROSTER REPORT"
@ 16,20 SAY "L...HELP SWIM QUALIFICATION REPORT"
@ 22,20
ACCEPT "SELECT OPTION ======>  " TO HELPOPT
ERASE
DO CASE
  CASE !(HELPOPT)= 'A'
TEXT
                            OPTION A...UNIT ROSTER
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The UNIT ROSTER REPORT will display in alphabetic order
the NAME, RANK, and PRIMARY MOS for each member of the
selected unit or subunit.  The screen will scroll
automatically unless stopped from the terminal.

5.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'B'
TEXT
                            OPTION B...TRAINING STATUS REPORT
1.  At the cursor, next to "select option ====>", type and
enter the letter (A-E) that corresponds to the unit
desired.
```

```
2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  A "WORKING" signal on the screen will be shown to
indicate that the computer is searching for the information
you requested.

5.  The TRAINING STATUS REPORT provides for all esstential
subjects, the PERCENT of the unit that has succesfully
completed each training element and the TOTAL number of
unit members that have completed each training element.  In
addition, the report includes completion status for PFT1,
PFT2, SWIMQUAL, RIFLE QUAL, and PISTOL QUAL.

6.  Press the enter key to return to the STANDARD REPORT
MENU.
ENDTEXT

CASE !(HELPOPT)= 'C'
TEXT
                    OPTION C...TRAINING ROSTER REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The TRAINING ROSTER REPORT heading will appear in the
center of the screen.  Press the enter key to begin the
report.
ENDTEXT
@ 22,0
ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
ERASE
TEXT

5.  The TRAINING ROSTER REPORT displays in alphabetic order
each member of the selected unit or subunit and his
complete training status for the current year.  If a
training element has been succesfully completed for the
current year, a letter corresponding to that training
element will be shown.  A "*" symbol indicates that a
training element has not been completed.  For example,
"FIRST AID AE*H**B**DF" indicates that elements ABDEF and H
have been completed and five of the eleven elements have
NOT been completed (i.e., C,G,I,J and K).  Four records
will be displayed on the screen and you will be asked to
press the enter key to scroll the report.

6.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'D'
TEXT
```

```
              OPTION D...INDIVIDUAL TRAINING REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'E'
TEXT
                OPTION E...MARKSMANSHIP STATUS REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The MARKSMANSHIP STATUS REPORT will display the
qualification results for the unit or subunit members that
have fired for qualifi- cation during the current year.
Also, the percent that has qualified in each category (eg.
EX,SS,MM,UNQ) and current year results for rifle and pistol
will be shown.  The pistol qualification results include
only those members required to fire the pistol for
qualification.  Press the enter key to continue with the
report.
ENDTEXT
@ 22,0
ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
ERASE

TEXT

5.  You will be asked if you want to do a company or
battalion range quota analysis.  If you answer no ("N"),
you will automatically return to the STANDARD REPORT MENU.
The range quota analysis allows you to observe, manipulate
or permanently change the rifle range quotas that are
assigned to the unit for the rest of the calendar year.
Range quota analysis may only be done for the battalion or
for a selected company (not platoons).

6.  At the top of the screen general rifle range quota
information is displayed followed by the number of quotas
remaining in the current calendar year.  Finally, an
indication whether remaining quotas are less than, greater
than, or equal to the number of Marines left to qualify is
shown.

7.  From this point you may change the quota allocation on
a scratch pad or you may return to the STANDARD REPORT
MENU.  The original set of quotas have not been modified.
```

```
ENDTEXT
@ 22,0
ACCEPT "PRESS 'ENTER' KEY TO CONTINUE" TO PROCEED
ERASE
TEXT

8.  The scratch pad again shows the remaining quota
allocations.  However, you may make any temporary quota
changes you desire on the scratch pad by simply overtyping
the current quota allocation(s).  The enter key will
automatically move the cursor to the next quota, and a
buzzer will sound when you reach the end of each field.

9.  After you've reached the last month's quota, you will
be asked to select one of the following three options:
    A...Start over on the scratch pad with the original set
        of quotas.
    B...Return to the STANDARD REPORT MENU
    C...PERMANENTLY REPLACE ORIGINAL QUOTAS with the set of
        quotas that are currently displayed on the screen.
        This is the only option that will actually modify
        the original set of quotas for the unit.

10.  Option A may be repeated indefinitely.  Option B or
option C will return you directly to the STANDARD REPORT
MENU.
ENDTEXT

CASE !(HELPOPT)= 'F'
TEXT
                 OPTION F...MARKSMANSHIP ROSTER REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The MARKSMANSHIP ROSTER REPORT will display in
alphabetical order the NAME, RANK, DATE OF QUALIFICATION,
and QUALIFICATION RESULTS for each member of the unit or
subunit.  Current year results only will be displayed.

5.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'G'
TEXT
                     OPTION G...MOS STATUS REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.
```

```
4.  The MOS STATUS REPORT displays the number of unit or
subunit members grouped by MOS and RANK.  The screen will
scroll automatically unless stopped from your terminal.

5.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'H'
TEXT
                    OPTION H...MOS ROSTER REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The MOS ROSTER REPORT groups by primary mos and
displays in alphabetic order the NAME, RANK, PRIMARY MOS
AND SECONDARY MOS of all members in the unit or subunit.

5.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'I'
TEXT
                    OPTION I...PERSONAL DATA REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The PERSONAL DATA REPORT displays for each member of
the unit or subunit all personal data including NAME, SSN,
RANK, PRIMARY/SECONDARY MOS, UNIT/SUBUNIT NAME, JOIN DATE,
EAS, BIRTHDATE, HEIGHT, WEIGHT and a one character comment
block.  If the comment block is "T" (true), a comment is
contained on the individual concerned in the comment file.
The screen will scroll upon pressing the enter key.

5.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'J'
TEXT
                    OPTION J...EST STATUS REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
```

```
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The EST STATUS REPORT includes the percent and total
number of unit or subunit members that have completed each
ESSENTIAL SUBJECT and the PFT.

5.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'K'
TEXT
                 OPTION K...EST ROSTER REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The EST ROSTER REPORT displays for each member of the
unit or subunit all of his esstential subject training and
PFT results for the current year.  A "*" character
indicates an element that has not been completed.  The
screen will scroll upon pressing the enter key.

5.  At the end of the report press the enter key to return
to the STANDARD REPORT MENU.
ENDTEXT

CASE !(HELPOPT)= 'L'
TEXT
             OPTION L...SWIM QUALIFICATION REPORT
1.  At the cursor, next to "select option ====>", type the
letter (A-E) that corresponds to the unit desired.  Enter
the letter by pressing the enter key.

2.  If a company was selected (A-D), you will next be asked
to select a subunit.  Enter the appropriate letter.  If you
want the report to include the entire unit selected, enter
"E" (i.e., ALL OF UNIT).

3.  If option "E" (i.e., BATTALION) was selected in the
select unit option, you will go directly to the report and
will not be asked to select a subunit.

4.  The SWIM QUALIFICATION REPORT displays in alphabetic
order for each member of the unit or subunit NAME, RANK,
UNIT and CURRENT SWIM QUAL RESULTS.

5.  At the end of the report a SUMMARY DATA TABLE is
displayed which shows the number of unit or subunit members
that have qualified in each category (S1, S2, S3, UNQ).

6.  Press the enter key to return to the STANDARD REPORT
MENU.
ENDTEXT
```

```
ENDCASE
@ 23,0
ACCEPT "PRESS 'ENTER' TO CONTINUE" TO PROCEED
ENDCASE
RETURN
```

APPENDIX H

MAINTENANCE MODULE LISTING

A. MAINTAIN CONTROL ROUTINE

```
* Routine Name: Maintain.Prg
* Module Name: Maintenance Module
* Version: 6.0
* Author: D.P. Haeusler
* Date: 30 Nov 83
* Variables Used: mdone,mntnopt
* Variables Modified: mdone, mntnopt
* Variables Created: mdone, mntnopt
* Variables Released: mdone, mntnopt
* Files (opened/closed): none
* Temporary Files Created: none
* Using Subroutines: Cmddet
* Description: This routine produces a module which gives
* the user the option of which maintenace function to
* activate.  Each function has an authorization level
* associated with and only appropriate users may activate
* certain modules.

STORE f TO AAdone
DO WHILE .NOT. AAdone
   ERASE
   @ 4,29 SAY "MAINTENANCE MODULE MENU"
   @ 6,24 SAY "SELECT ONE OF THE FOLLOWING OPTIONS"
   @ 8,31 SAY "V...VIEW INDIVIDUAL DATA"
   @ 9,31 SAY "U...UPDATE DATA"
   @ 10,31 SAY "C...CREATE AN ITR"
   @ 11,31 SAY "D...DELETE AN ITR"
   @ 12,31 SAY "S...SYSTEM FUNCTIONS"
   @ 13,31 SAY "H...HELP"
   @ 14,29 SAY "* Q...QUIT *"
   @ 15,0 SAY " "

   ACCEPT "            SELECT OPTION ===>" TO mntnopt

   DO CASE
      CASE !(mntnopt) = 'V'
         DO viewitr
      CASE !(mntnopt) = 'U'
         IF AAlevel < 3
            DO updtitr
         ELSE
            ERASE
            @ 8,31 SAY "ACCESS UNAUTHORIZED"
            DO pause
         ENDIF
      CASE !(mntnopt) = 'C'
         IF AAlevel < 3
            DO creatitr
         ELSE
            ERASE
            @ 8,31 SAY "ACCESS UNAUTHORIZED"
            DO pause
         ENDIF
      CASE !(mntnopt) = 'D'
         IF AAlevel = 1
            DO deletitr
```

```
         ELSE
            ERASE
            @ 8,31 SAY "ACCESS UNAUTHORIZED"
            DO pause
         ENDIF
      CASE !(mntnopt) = 'S'
         IF AAlevel = 1
            DO system
         ELSE
            ERASE
            @ 8,31 SAY "ACCESS UNAUTHORIZED"
            DO pause
         ENDIF
      CASE !(mntnopt) = 'H'
         STORE 2 TO HELPOPT
         DO B:HELP2
      CASE !(mntnopt) = 'Q'
         STORE t TO AAdone
         ERASE
   ENDCASE
ENDDO
RELEASE mntnopt, HELPOPT
RELEASE AADONE
RETURN
```

B. VIEW CONTROL ROUTINE

```
* Routine Name: Viewitr.prg
* Module Name: Maintenance Module
* Version: 6.1.0
* Author: D.P. Haeusler
* Date: 1 Dec 83
* Variables Used: vdone, vfinish, vname, vcomp, vagain,
*                 vssn, vend, view
* Variables Modified: same as above
* Variables Created: same as above
* Variables Released: all like v???????
* Files (opened/closed): a:pers(opened/closed)
* Temporary Files Created: none
* Using Subroutines: maintain.prg, stdrpt.prg
* Description:This routine controls the creation of the
* ITR for viewing only.  It does not allow any changes to
* data.

STORE F TO VNOFIND
STORE F TO VDONE

DO WHILE .NOT. VDONE
   STORE F TO VFINISH
   DO WHILE .NOT. VFINISH .AND. .NOT. VDONE
      ERASE
      @ 8,31 SAY "TO LOCATE AN ITR"
      @ 9,31 SAY "ENTER NAME (LAST, FIRST MI.)"
      ACCEPT "                     NAME ===>" TO VNAME

      STORE !(VNAME) TO VNAME
      USE A:PERS INDEX A:ALPHPERS
      FIND &VNAME

      IF # = 0
         ERASE

         @ 8,31 SAY " INDIVIDUAL IS NOT IN THE DATA BASE"
         STORE F TO VCOMP
         DO WHILE  .NOT. VCOMP
            ACCEPT "DO YOU WANT TO TRY AGAIN (Y/N)" ;
            TO VAGAIN
            STORE !(VAGAIN) TO VAGAIN
            DO CASE
               CASE VAGAIN = 'N'
                  STORE T TO VDONE
                  STORE T TO VCOMP
                  STORE T TO FINISH
               CASE VAGAIN = 'Y'
                  STORE T TO VCOMP
                  STORE T TO VNOFIND
            ENDCASE
         ENDDO
      ELSE
         STORE SSN TO AASSN
         STORE COMMENT TO STCOMMNT
         USE

         STORE F TO VEND
         DO WHILE .NOT. VEND
            STORE T TO VEND
            DO ITRSCRN
            DO GETDATA
            @ 24,24 SAY "** PRESS ANY KEY TO CONTINUE **"
            SET CONSOLE OFF
            WAIT
            SET CONSOLE ON
            STORE F TO VIEW
```

```
            IF STCOMMNT
               STORE F TO VCOMP
               DO WHILE .NOT.VCOMP
                  ACCEPT " DO YOU WANT TO VIEW COMMENTS;
(Y/N)?" TO VAGAIN
                  DO CASE
                     CASE !(VAGAIN) = 'N'
                        STORE T TO VCOMP
                        STORE F TO VIEW
                        STORE T TO VFINISH
                        STORE T TO VDONE
                     CASE !(VAGAIN) = 'Y'
                        STORE T TO VCOMP
                        STORE T TO VIEW
                  ENDCASE
               ENDDO
               IF VIEW
                  DO GETCMMNT
               ENDIF
            ENDIF
            @ 24,0
            STORE T TO VFINISH
            STORE F TO VCOMP
            DO WHILE .NOT. VCOMP .AND. VIEW
               ACCEPT " DO YOU WANT TO VIEW ITR AGAIN;
 (Y/N)?" TO VAGAIN
               DO CASE
                  CASE !(VAGAIN) = 'Y'
                     STORE T TO VCOMP
                     STORE F TO VEND
                  CASE !(VAGAIN) = 'N'
                     STORE T TO VCOMP
                     STORE T TO VEND
               ENDCASE
            ENDDO
         ENDDO
      ENDIF
   ENDDO
   ERASE
   STORE F TO VCOMP
   DO WHILE .NOT. VCOMP .AND. .NOT. VNOFIND
      @ 11,24 SAY " TO VIEW ANOTHER ITR"
      ACCEPT "                   ENTER (Y/N) ===>";
      TO VAGAIN
      DO CASE
         CASE !(VAGAIN) = 'Y'
            STORE T TO VCOMP
         CASE !(VAGAIN) = 'N'
            STORE T TO VCOMP
            STORE T TO VDONE
      ENDCASE
   ENDDO
ENDDO
RELEASE ALL EXCEPT AA??????
RETURN
```

C. ITR SCREEN FORMAT ROUTINE

```
* Routine Name: Itrscrn.prg
* Module Name: Mainterance Module
* Version: 6.1.0.1
* Author: D.P. Haeusler
* Date: 1 DEC 83
* Variables Used:NONE
* Variables Modified:NONE
* Variables Created:NONE
* Variables Released:NONE
* Files (opened/closed): NONE
* Temporary Files Created: NONE
* Using Subroutines: Viewitr, Creatitr, Updtitr, Deletitr
* Description: This routine formats the screen in the
* representation of an ITR.

ERASE

@ 0,25 SAY "INDIVIDUAL TRAINING RECORD"
@ 1,8 SAY "NAME:"
@ 1,46 SAY "GRADE:"
@ 1,57 SAY "MOS:"
@ 1,66 SAY "/:"
@ 2,8 SAY "BIRTHDATE.....:"
@ 2,40 SAY "SSN....:"
@ 3,8 SAY "CO:"
@ 3,18 SAY "PLAT:"
@ 3,33 SAY "JOIN:"
@ 3,46 SAY "EAS..:"
@ 3,58 SAY "GAS MASK..:"
@ 4,8 SAY "MIL CODE OF CONDUCT:"
@ 4,40 SAY "PFT1......:"
@ 4,55 SAY "/:"
@ 4,61 SAY "DATE:"
@ 5,8 SAY "HISTORY OF MARCOR..:"
@ 5,40 SAY "PFT2......:"
@ 5,55 SAY "/:"
@ 5,61 SAY "DATE:"
@ 6,8 SAY "DRILL..............:"
@ 6,40 SAY "NBC.....:"
@ 7,8 SAY "INTERIOR GUARD.....:"
@ 7,40 SAY "MARKSMANSHIP.......:"
@ 8,8 SAY "FIRST AID..........:"
@ 8,40 SAY "INDIVIDUAL TACTICAL"
@ 9,8 SAY "EQUIP & UNIFORM....:"
@ 9,40 SAY "MEASURES..........:"
@ 11,8 SAY "SWIM QUAL...:"
@ 11,24 SAY "DATE:"
@ 11,40 SAY "WEIGHT CONTROL....:"
@ 12,8 SAY "RIFLE QUAL..:"
@ 12,25 SAY "/:"
@ 12,31 SAY "DATE:"
@ 12,49 SAY "WEIGHT...:"
@ 13,8 SAY "PISTOL QUAL.:"
@ 13,25 SAY "/:"
@ 13,31 SAY "DATE:"
@ 13,49 SAY "HEIGHT...:"
@ 15,8 SAY "ELECTRONIC WARFARE..:"
@ 15,40 SAY "DRUG ABUSE.........:"
@ 16,8 SAY "CLD WEATHER.........:"
@ 16,40 SAY "ALCOHOL ABUSE......:"
@ 17,8 SAY "LAW OF WAR..........:"
@ 17,40 SAY "HUMAN RELATIONS...:"
@ 18,8 SAY "TRAINING MOS........:"
@ 18,40 SAY "PERSONAL AFFAIRS..:"
@ 19,8 SAY "LEADERSHIP..........:"
@ 19,40 SAY "UCMJ...............:"
```

```
@ 20,8 SAY "CHAR & MCRAL ED.....:"
@ 21,8 SAY "CMMENTS.:"

RETURN
```

D. SCREEN DATA RETRIEVALROUTINE

```
* Routine Name: Getdata.prg
* Module Name: Maintenance Module
* Version: 6.1.0.2
* Author: D. P. Haeusler
* Date: 1 Dec 83
* Variables Used: vssn
* Variables Modified: NONE
* Variables Created: NONE
* Variables Released:NONE
* Files (opened/closed): a:pers(opened/closed),
*                        b:est(opened/closed),
*                        b:qual(opened/closed)
*                        b:infomisc(opened/closed)
* Temporary Files Created:NONE
* Using Subroutines:Viewitr, Updtitr, Deletitr
* Description: This routine retrieves the information
* stored in the data base for the individual specified by
* vssn.  It then arranges it in the screen format created
* by Itrscrn.prg.

STORE AASSN TO VSSN
USE A:PERS INDEX A:PERSSN
FIND &VSSN

@ 1,13 SAY NAME
@ 1,52 SAY RANK
@ 1,61 SAY PRIMEMOS
@ 1,68 SAY SECMOS
@ 2,23 SAY BRTHDATE
@ 2,49 SAY SSN
@ 3,11 SAY COMPANY
@ 3,23 SAY PLATOON
@ 3,38 SAY JOINDATE
@ 3,51 SAY EAS
@ 3,69 SAY GASMASK
@ 11,59 SAY WTCONT
@ 12,59 SAY WEIGHT
@ 13,59 SAY HEIGHT
@ 21,17 SAY COMMENT

USE B:EST INDEX B:ESTSSN
FIND &VSSN

@ 4,28 SAY COC
@ 4,51 SAY PFT1RAW
@ 4,57 SAY PFT1CLSS
@ 4,66 SAY PFT1DATE
@ 5,28 SAY HIS
@ 5,51 SAY PFT2RAW
@ 5,57 SAY PFT2CLSS
@ 5,66 SAY PFT2DATE
@ 6,28 SAY COD
@ 6,48 SAY NBC
@ 7,28 SAY INT
@ 7,59 SAY MKS
@ 8,28 SAY AID
@ 9,28 SAY UNI
@ 9,59 SAY TAC

USE B:QUAL INDEX B:QUALSSN
FIND &VSSN

@ 11,20 SAY SWIMQUAL
@ 11,29 SAY SWIMDATE
@ 12,21 SAY RFLSCORE
@ 12,27 SAY RFLQUAL
```

```
@ 12,36 SAY RFLDATE
@ 13,21 SAY PSTSCORE
@ 13,27 SAY PSTQUAL
@ 13,36 SAY PSTDATE

USE B:INFCMISC INDEX E:INFOSSN
FIND &VSSN

@ 15,29 SAY ELECWAR
@ 15,59 SAY DRUG
@ 16,29 SAY CLDWTHR
@ 16,59 SAY ALCOHOL
@ 17,29 SAY LAWWAR
@ 17,59 SAY HUMREL
@ 18,29 SAY MOS
@ 18,59 SAY PERSAFFR
@ 19,29 SAY LDRSHP
@ 19,59 SAY UCMJ
@ 20,29 SAY CHRMCRED

USE
RETURN
```

E. COMMENT RETRIEVAL ROUTINE

```
* Routine Name: Getcmmnt.prg
* Module Name: Maintenance Module
* Version: 6.1.1
* Author: D.P. Haeusler
* Date: 10 Jan 84
* Variables Used: none
* Variables Modified: none
* Variables Created: none
* Variables Released: none
* Files (opened/closed): a:cmmnt(o/c)
* Temporary Files Created: none
* Using Subroutines: Viewitr.prg
* Description: This routine displays the contents of the
* comments data base file.

ERASE
@ 5,33 SAY "COMMENT SECTION"
USE A:CMMNT INDEX A:CMMNTSSN
FIND &AASSN
@ 8,2 SAY INFOTXT1
@ 8,51 SAY INFOTXT2
@ 9,2 SAY INFOTXT3
@ 9,51 SAY INFOTXT4
@ 10,2 SAY INFOTXT5
@ 10,51 SAY INFOTXT6
@ 11,2 SAY INFOTXT7
@ 11,51 SAY INFOTXT8
@ 12,2 SAY INFOTXT9
@ 12,51 SAY INFOTXT0
USE
RETURN
```

F. UPDATE CONTROL ROUTINE

```
* Routine Name: Updtitr.prg
* Module Name: Maintenance Module
* Version: 6.2.0
* Author: D.P. Haeusler
* Date: 2 Dec 83
* Variables Used: aaadone, upname, upcomp, upagain, aassn
* Variables Modified: aaadone, upname, upcomp, upagain,
*                     aassn
* Variables Created: aaadone, upname, upcomp, upagain,
*                    aassn
* Variables Released: all like up??????, aassn, aaadone
*                    aathru, aacorr
* Files (opened/closed): a:pers (OPENED/CLOSED)
* Temporary Files Created: NONE
* Using Subroutines: Maintain.prg
* Description: This routine finds the ITR to be updated
* and controls the update routines.

STORE F TO AAADONE

DO WHILE .NOT. AAADONE
   ERASE
   @ 8,24 SAY "WHICH ITR IS TO BE"
   @ 9,23 SAY "UPDATED OR CORRECTED?"
   @ 10,23 SAY "NAME (LAST, FIRST MI.)"
   ACCEPT "                    NAME ===>" TO UPNAME

   STORE !(UPNAME) TO UPNAME
   USE A:PERS INDEX a:ALPHPERS
   FIND &UPNAME

   IF # = 0
      ERASE
      @ 8,24 SAY "INDVIDUAL IS NOT IN THE DATA BASE"
      @ 9,23 SAY "OR YOU HAVE ENTERED AN INCORRECT NAME"

      STORE F TO UPCOMP

      DO WHILE .NOT. UPCOMP
         ACCEPT "        DO YOU WANT TO TRY AGAIN (Y/N)?";
         TO UPAGAIN
         DO CASE
            CASE !(UPAGAIN) = 'Y'
               STORE T TO UPCOMP

            CASE !(UPAGAIN) = 'N'
               STORE T TO UPCOMP
               STORE T TO AAADONE
         ENDCASE
      ENDDO
   ELSE
      STORE SSN TO AASSN
      USE
      DO ITRSCRN
      DO GETDATA
      DO UPDATA
      STORE F TO UPCOMP
      DO WHILE .NOT. UPCOMP
         ERASE
         ACCEPT " DO YOU WANT TO UPDATE ANOTHER ITR;
 (Y/N)?" TO UPAGAIN
         DO CASE
            CASE !(UPAGAIN) = 'Y'
               STORE T TO UPCOMP
            CASE !(UPAGAIN) = 'N'
               STORE T TO UPCOMP
```

```
               STORE T TO AAADONE
         ENDCASE
      ENDDO
   ENDIF
ENDDO
RELEASE ALL EXCEPT AA??????
RELEASE AASSN, AATHRU, AACORR, AAADONE

RETURN
```

G. DATA UPDATE ROUTINE

```
* Routine Name: Updata.prg
* Module Name: Maintenance Module
* Version: 6.2.0.1
* Author: D. P. Haeusler
* Date: 8 Dec 83
* Variables Used: aathru, aacorr, upopt, inname, inrank,
*                 upcormos, inprime, insec, inbrth, inssn,
*                 erropt, incomp, inplat, injndate, ineas,
*                 ingas, incode, inpft1, calcopt, wthru,
*                 wdate, inpftdt1, inpftdt2, inswdt,
*                 inrfldt, inpstdt, inhis, inpft2, indrill
*                 innbc, inint, inmks, inaid, inuni,
*                 intac, inswqu, inrflsc, inweight,
*                 inpstsc, inhght, inelec, indrug,
*                 incldwtr,inalch, inlaw, inhum, inmcs,
*                 inpersaf, inldr, inucmj, inchrmor,
*                 incommnt
* Variables Modified: same as above
* Variables Created: same as above
* Variables Released: all like in??????
* Files (opened/closed): a:pers (opened/closed)
*                        b:qual (opened/closed)
*                        b:est (opened/closed)
*                        b:infomisc (opened/closed)
* Temporary Files Created: none
* Using Subroutines: updtitr.prg
* Description: This routine prompts the user to choose a
* specific field of the ITR to update.  It then locates
* that field in the data base and replaces the old data
* with new data.  It also calls error checking routines
* and a calculate function.

STORE F TO AATHRU

DO WHILE .NOT. AATHRU
   STORE F TO AACORR
   DO WHILE .NOT. AACORR
      RELEASE ALL LIKE IN??????
      STORE "                                " TO UPOPT
      @ 22,0
      @ 23,0
      @ 22,1 SAY " OPTION: FIELD TO BE CHANGED OR 'Q';
 TO QUIT."
      @ 23,1 SAY " OPTION ===>" GET UPOPT PICTURE "XXXXXX;
XXXXXXXXXXXXXXXXXXXXXXXX"
      READ
      STORE !(UPOPT) TO UPOPT
      DO CASE
         CASE UPOPT = 'NAME'
            STORE T TO AACORR
            USE A:PERS INDEX A:PERSSN, A:ALPHPERS
            FIND &AASSN
            STORE NAME TO  INNAME
            @ 1,12 GET INNAME PICTURE "XXXXXXXXXXXXXXXXX;
XXXXXXXXXXXX"
            READ
            REPLACE NAME WITH !(INNAME)
            USE

         CASE UPOPT = 'GRADE'
            STORE T TO AACORR
            USE A:PERS INDEX A:PERSSN
            FIND &AASSN
            STORE RANK TO  INRANK
            @ 1,51 GET INRANK PICTURE "XX"
            READ
```

```
   STORE 1 TO ERROPT
   DO ERROR
   REPLACE RANK WITH !(INRANK)
   USE

CASE UPOPT = 'MOS'
   STORE T TO AACORR
   @ 23,0
   @ 24,0
   STORE F TO UPCORMOS
   DO WHILE .NOT. UPCORMOS
      @ 23,1 SAY " PRIMARY OR SECONDARY?"
      ACCEPT "ENTER P OR S ====>" TO UPAGAIN
      DO CASE
         CASE !(UPAGAIN) = 'P'
            STORE T TO UPCORMOS
            USE A:PERS INDEX A:PERSSN , A:MOSNDX
            FIND &AASSN
            STORE PRIMEMOS TO INPRIME
            @ 1,60 GET INPRIME PICTURE "9999"
            READ
            REPLACE PRIMEMOS WITH !(INPRIME)
            USE

         CASE !(UPAGAIN) = 'S'
            STORE T TO UPCORMOS
            USE A:PERS INDEX A:PERSSN
            FIND &AASSN
            STORE SECMOS TO INSEC
            @ 1,67 GET INSEC PICTURE "9999"
            READ
            REPLACE SECMOS WITH INSEC
            USE
      ENDCASE
   ENDDO

CASE UPOPT = 'BIRTHDATE'
   STORE T TO AACORR
   USE A:PERS INDEX A:PERSSN
   FIND &AASSN
   STORE BRTHDATE TO INBRTH
   @ 2,22 GET INBRTH PICTURE "XXXXXX"
   READ
   STORE 2 TO ERROPT
   DO ERROR
   REPLACE BRTHDATE WITH INBRTH
   USE

CASE UPOPT = 'SSN'
   STORE T TO AACORR
   USE A:PERS INDEX A:PERSSN
   FIND &AASSN
   STORE SSN TO INSSN
   @ 2,48 GET INSSN PICTURE "999999999"
   READ
   REPLACE SSN WITH INSSN
   USE
   USE A:CMMNT INDEX A:CMMNTSSN
   FIND &AASSN
   REPLACE SSN WITH INSSN
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   REPLACE SSN WITH INSSN
   USE B:QUAL INDEX B:QUALSSN
   FIND &AASSN
   REPLACE SSN WITH INSSN
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   REPLACE SSN WITH INSSN
```

```
      STORE INSSN TO AASSN
      USE

   CASE UPOPT = 'CO'
      STORE T TO AACORR
      USE A:PERS INDEX A:PERSSN
      FIND &AASSN
      STORE COMPANY TO INCOMP
      @ 3,10 GET INCOMP PICTURE "XXXXXX"
      READ
      REPLACE COMPANY WITH !(INCOMP)
      USE

   CASE UPOPT = 'PLAT'
      STORE T TO AACORR
      USE A:PERS INDEX A:PERSSN
      FIND &AASSN
      STORE PLAT TO INPLAT
      @ 3,22 GET INPLAT PICTURE "XXXXXXXXX"
      READ
      REPLACE PLATOON WITH !(INPLAT)
      USE

   CASE UPOPT = 'JOIN'
      STORE T TO AACORR
      USE A:PERS INDEX A:PERSSN
      FIND &AASSN
      STORE JOINDATE TO INJNDATE
      @ 3,37 GET INJNDATE PICTURE "XXXXXX"
      READ
      STORE 3 TO ERROPT
      DO ERROR
      REPLACE JOINDATE WITH INJNDATE
      USE

   CASE UPOPT = 'EAS'
      STORE T TO AACORR
      USE A:PERS INDEX A:PERSSN
      FIND &AASSN
      STORE EAS TO INEAS
      @ 3,50 GET INEAS PICTURE "XXXXXX"
      READ
      REPLACE EAS WITH INEAS
      USE

   CASE UPOPT = 'GAS MASK'
      STORE T TO AACORR
      USE A:PERS INDEX A:PERSSN
      FIND &AASSN
      STORE GASMASK TO INGAS
      @ 3,68 GET INGAS PICTURE "X"
      READ
      STORE 4 TO ERROPT
      DO ERROR
      REPLACE GASMASK WITH !(INGAS)
      USE

   CASE UPOPT = 'MIL CODE OF CONDUCT'
      STORE T TO AACORR
      USE B:EST INDEX B:ESTSSN
      FIND &AASSN
      STORE COC TO INCODE
      @ 4,27 GET INCODE PICTURE "XXX"
      READ
      REPLACE COC WITH !(INCODE)
      USE

   CASE UPOPT = 'PFT1'
      STORE T TO AACORR
```

```
           USE B:EST INDEX B:ESTSSN
           FIND &AASSN
           STORE PFT1RAW TO INPFT1
           @ 4,50 GET INPFT1 PICTURE "999"
           READ
           STORE 5 TO ERROPT
           DO ERROR
           REPLACE PFT1RAW WITH INPFT1
           USE
           STORE 1 TO CALCOPT
           DO CALCULAT

        CASE UPOPT = 'DATE'
          STORE F TO WTHRU
          STORE T TO AACORR
          DO WHILE .NOT. WTHRU
             @ 23,0
             @ 24,0
             @ 23,1 SAY " A..PFT1, B..PFT2, C..SWIM,;
D..RIFLE, E..PISTOL"
             ACCEPT "WHICH DATE IS TO BE ENTERED ===> ";
             TO WDATE
             STORE !(WDATE) TO WDATE
             DO CASE
                CASE WDATE = 'A'
                   STORE T TO WTHRU
                   USE B:EST INDEX B:ESTSSN
                   FIND &AASSN
                   STORE PFT1DATE TO INPFTDT1
                   @ 4,65 GET INPFTDT1 PICTURE "XXXXXX"
                   READ
                   STORE 6 TO ERROPT
                   DO ERROR
                   REPLACE PFT1DATE WITH INPFTDT1
                   USE

                CASE WDATE = 'B'
                   STORE T TO WTHRU
                   USE B:EST INDEX B:ESTSSN
                   FIND &AASSN
                   STORE PFT2DATE TO INPFTDT2
                   @ 5,65 GET INPFTDT2 PICTURE "XXXXXX"
                   READ
                   STORE 8 TO ERROPT
                   DO ERROR
                   REPLACE PFT2DATE WITH INPFTDT2
                   USE

                CASE WDATE = 'C'
                   STORE T TO WTHRU
                   USE B:QUAL INDEX B:QUALSSN
                   FIND &AASSN
                   STORE SWIMDATE TO INSWDT
                   @ 11,28 GET INSWDT PICTURE "XXXXXX"
                   READ
                   STORE 10 TO ERROPT
                   DO ERROR
                   REPLACE SWIMDATE WITH INSWDT
                   USE

                CASE WDATE = 'D'
                   STORE T TO WTHRU
                   USE B:QUAL INDEX B:QUALSSN
                   FIND &AASSN
                   STORE RFLDATE TO INRFLDT
                   @ 12,35 GET INRFLDT PICTURE "XXXXXX"
                   READ
                   STORE 12 TO ERROPT
                   DO ERROR
```

```
           REPLACE RFLDATE WITH INRFLDT
           USE

        CASE WDATE = 'E'
           STORE T TO WTHRU
           USE B:QUAL INDEX B:QUALSSN
           FIND &AASSN
           STORE PSTDATE TO INPSTDT
           @ 13,35 GET INPSTDT PICTURE "XXXXXX"
           READ
           STORE 15 TO ERROPT
           DO ERROR
           REPLACE PSTDATE WITH INPSTDT
           USE
     ENDCASE
  ENDDO

CASE UPOPT = 'HISTORY OF MARCOR'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE HIS TO INHIS
   @ 5,27 GET INHIS PICTURE "XXX"
   READ
   REPLACE HIS WITH INHIS
   USE

CASE UPOPT = 'PFT2'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE PFT2RAW TO INPFT2
   @ 5,50 GET INPFT2 PICTURE "999"
   READ
   STORE 7 TO ERROPT
   DO ERROR
   REPLACE PFT2RAW WITH INPFT2
   USE
   STORE 2 TO CALCOPT
   DO CALCULAT

CASE UPOPT = 'DRILL'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE  COD TO INDRILL
   @ 6,27 GET INDRILL PICTURE "XXX"
   READ
   REPLACE COD WITH INDRILL
   USE

CASE UPOPT = 'NBC'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE NBC TO INNBC
   @ 6,47 GET INNBC PICTURE "XXXXXX"
   READ
   REPLACE NBC WITH INNBC
   USE

CASE UPOPT = 'INTERIOR GUARD'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE INT TO ININT
   @ 7,27 GET ININT PICTURE "XXX"
   READ
   REPLACE INT WITH ININT
```

```
   USE

CASE UPOPT = 'MARKSMANSHIP'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE MKS TO INMKS
   @ 7,58 GET INMKS PICTURE "XXXXXX"
   READ
   REPLACE MKS WITH INMKS
   USE

CASE UPOPT = 'FIRST AID'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE AID TO INAID
   @ 8,27 GET INAID PICTURE "XXXXXXXXXX"
   READ
   REPLACE AID WITH INAID
   USE

CASE UPOPT = 'EQUIP & UNIFORM'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE UNI TO INUNI
   @ 9,27 GET INUNI PICTURE "XXX"
   READ
   REPLACE UNI WITH INUNI
   USE

CASE UPOPT = 'INDIVIDUAL TACTICAL MEASURES'
   STORE T TO AACORR
   USE B:EST INDEX B:ESTSSN
   FIND &AASSN
   STORE TAC TO INTAC
   @ 9,58 GET INTAC PICTURE "XXXXX"
   READ
   REPLACE TAC WITH INTAC
   USE

CASE UPOPT = 'SWIM QUAL'
   STORE T TO AACORR
   USE B:QUAL INDEX B:QUALSSN
   FIND &AASSN
   STORE SWIMQUAL TO INSWQU
   @ 11,19 GET INSWQU PICTURE "XX"
   READ
   STORE  9 TO ERROPT
   DO ERROR
   REPLACE SWIMQUAL WITH INSWQU
   USE

CASE UPOPT = 'RIFLE QUAL'
   STORE T TO AACORR
   USE B:QUAL INDEX B:QUALSSN
   FIND &AASSN
   STORE RFLSCORE TO INRFLSC
   @ 12,20 GET INRFLSC PICTURE "999"
   READ
   STORE 11 TO ERROPT
   DO ERROR
   REPLACE RFLSCORE WITH INRFLSC
   USE
   STORE 3 TO CALCOPT
   DO CALCULAT

CASE UPOPT = 'WEIGHT'
```

```
   STORE T TO AACORR
   USE A:PERS INDEX A:PERSSN
   FIND &AASSN
   STORE WEIGHT TO INWEIGHT
   @ 12,58 GET INWEIGHT PICTURE "999"
   READ
   STORE 13 TO ERROPT
   DO ERROR
   REPLACE WEIGHT WITH INWEIGHT
   USE
   STORE 5 TO CALCOPT
   DO CALCULAT

CASE UPOPT = 'PISTOL QUAL'
   STORE T TO AACORR
   USE B:QUAL INDEX B:QUALSSN
   FIND &AASSN
   STORE PSTSCORE TO INPSTSC
   @ 13,20 GET INPSTSC PICTURE "999"
   READ
   STORE 14 TO ERROPT
   DO ERROR
   REPLACE PSTSCORE WITH INPSTSC
   USE
   STORE 4 TO CALCOPT
   DO CALCULAT

CASE UPOPT = 'HEIGHT'
   STORE T TO AACORR
   USE A:PERS INDEX A:PERSSN
   FIND &AASSN
   STORE HEIGHT TO INHGHT
   @ 13,58 GET INHGHT PICTURE "99"
   READ
   STORE 16 TO ERROPT
   DO ERROR
   REPLACE HEIGHT WITH INHGHT
   USE
   STORE 5 TO CALCOPT
   DO CALCULAT

CASE UPOPT = 'ELECTRONIC WARFARE'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE ELECWAR TO INELEC
   @ 15,28 GET INELEC PICTURE "XXXXXX"
   READ
   REPLACE ELECWAR WITH INELEC
   USE

CASE UPOPT = 'DRUG ABUSE'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE DRUG TO INDRUG
   @ 15,57 GET INDRUG PICTURE "XXXXXX"
   READ
   REPLACE DRUG WITH INDRUG
   USE

CASE UPOPT = 'CLD WEATHER'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE CLDWTHR TO INCLDWTR
   @ 16,28 GET INCLDWTR PICTURE "XXXXXX"
   READ
   REPLACE CLDWTHR WITH INCLDWTR
```

```
   USE

CASE UPOPT = 'ALCOHOL ABUSE'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE ALCOHOL TO INALCH
   @ 16,58 GET INALCH PICTURE "XXXXXX"
   READ
   REPLACE ALCOHOL WITH INALCH
   USE

CASE UPOPT = 'LAW OF WAR'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE LAWWAR TO INLAW
   @ 17,28 GET INLAW PICTURE "XXXXXX"
   READ
   REPLACE LAWWAR WITH INLAW
   USE

CASE UPOPT = 'HUMAN RELATIONS'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE HUMREL TO INHUM
   @ 17,58 GET INHUM PICTURE "XXXXXX"
   READ
   REPLACE HUMREL WITH INHUM
   USE

CASE UPOPT = 'TRAINING MOS'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE MOS TO INMOS
   @ 18,27 GET INMOS PICTURE "XXXX"
   READ
   REPLACE MOS WITH INMOS
   USE

CASE UPOPT = 'PERSONAL AFFAIRS'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE PERSAFFR TO INPERSAF
   @ 18,58 GET INPERSAF PICTURE "XXXXXX"
   READ
   REPLACE PERSAFFR WITH INPERSAF
   USE

CASE UPOPT = 'LEADERSHIP'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE LDRSHP TO INLDR
   @ 19,28 GET INLDR PICTURE "XXXXXX"
   READ
   REPLACE LDRSHP WITH INLDR
   USE

CASE UPOPT = 'UCMJ'
   STORE T TO AACORR
   USE B:INFOMISC INDEX B:INFOSSN
   FIND &AASSN
   STORE UCMJ TO INUCMJ
   @ 19,58 GET INUCMJ PICTURE "XXXXXX"
   READ
```

```
            REPLACE UCMJ WITH INUCMJ
            USE

         CASE UPOPT = 'CHAR & MORAL ED'
            STORE T TO AACORR
            USE B:INFOMISC INDEX B:INFOSSN
            FIND &AASSN
            STORE CHRMORED TO INCHRMOR
            @ 20,28 GET INCHRMOR PICTURE "XXXXXX"
            READ
            REPLACE CHRMORED WITH INCHRMOR
            USE

         CASE UPOPT = 'CMMENTS'
            STORE T TO AACORR
            USE A:PERS INDEX A:PERSSN
            FIND &AASSN
            IF COMMENT
               DO WRTCMMNT
               DO ITRSCRN
               DO GETDATA
            ELSE
               STORE F TO INCOMMNT
               @ 21,16 GET INCOMMNT PICTURE "X"
               READ
               REPLACE COMMENT WITH INCOMMNT
               USE
               IF INCOMMNT
                  DO CRTCMMNT
                  DO WRTCMMNT
                  DO ITRSCRN
                  DO GETDATA
               ENDIF
            ENDIF

         CASE UPOPT = 'Q'
            STORE T TO AACORR
            STORE T TO AATHRU
      ENDCASE
   ENDDO
ENDDO
RETURN
```

B. ITR CREATION CONTROL ROUTINE

```
* Routine Name: Creatitr.prg
* Module Name:  Maintenance Module
* Version: 6.3.0
* Author:D.F. HAEUSLER
* Date: 2 Dec 83
* Variables Used: crcomp, aafini, cragain
* Variables Modified: same as above
* Variables Created: same as above
* Variables Released: same as above
* Files (opened/closed): NONE
* Temporary Files Created: NONE
* Using Subroutines: Maintain.prg
* Description: This routine controls the creation of new
* ITR's.

STORE F TO AAFINI

DO WHILE .NOT. AAFINI
   ERASE
   DO ITRSCRN
   DO INDATA

   STORE F TO CRCOMP

   DO WHILE .NOT. CRCOMP
      ERASE
      ACCEPT "DO YOU WANT TO CREATE ANOTHER ITR (Y/N)?";
      TO CRAGAIN
      DO CASE
         CASE !(CRAGAIN) = 'Y'
            STORE T TO CRCOMP

         CASE !(CRAGAIN) = 'N'
            STORE T TO CRCOMP
            STORE T TO AAFINI

      ENDCASE
   ENDDO
ENDDO
RELEASE ALL LIKE CR??????
RELEASE AAFINI
USE

RETURN
```

I. ITR DATA INITIALIZATION ROUTINE

```
* Routine Name: Indata.prg
* Module Name: Maintenance Module
* Version: 6.3.1
* Author: D.P. Haeusler
* Date: 2 Dec 83
* Variables Used: aadate, vssn, in*, aassn
* Variables Modified: in*, aassn
* Variables Created: in*, aassn
* Variables Released: in*, aassn
* Files (opened/closed): a:pers(O/C), b:est(O/C),
*                        b:infcmisc(O/C), b:qual(O/C)
* Temporary Files Created: None
* Using Subroutines: Creatitr.prg
* Description: This routine inserts the data in the
* training record format on the screen and checks for
* errors in the data entry.  The data is then inserted in
* the data base.

STORE AADATE TO INDATE
STORE "LAST, FIRST MI.                    " TO INNAME
STORE "  " TO INRANK
STORE "    " TO INPRIMEM
STORE "    " TO INSECMOS
STORE "DDMMYY" TO INBRTH
STORE "         " TO INSSN
STORE "      " TO INCOMP
STORE "         " TO INPLAT
STORE "DDMMYY" TO INJNDATE
STORE "DDMMYY" TO INEAS
STORE " " TO INGAS
STORE "***" TO INCODE
STORE 000 TO INPFT1
STORE "DDMMYY" TO INPFTDT1
STORE "***" TO INHIS
STORE 000 TO INPFT2
STORE "DDMMYY" TO INPFTDT2
STORE "***" TO INDRILL
STORE "******" TO INNEC
STORE "***" TO ININT
STORE "******" TO INMKS
STORE "************" TO INAID
STORE "***" TO INUNI
STORE "*****" TO INTAC
STORE "S " TO INSWQU
STORE "DDMMYY" TO INSWDT
STORE "000" TO INRFLSC
STORE "DDMMYY" TO INRFLDT
STORE "000" TO INWEIGHT
STORE "000" TO INPSTSC
STORE "DDMMYY" TO INPSTDT
STORE "00" TO INHGHT
STORE "******" TO INELEC
STORE "******" TO INDRUG
STORE "******" TO INCIDWTR
STORE "******" TO INALCH
STORE "******" TO INLAW
STORE "******" TO INRUM
STORE "****" TO INMOS
STORE "******" TO INPERSAF
STORE "******" TO INIDR
STORE "******" TO INUCMJ
STORE "******" TO INCHRMOR
STORE F TO INCOMMNT
STORE F TO INWTCCNT
STORE " " TO INPFT1CL
STORE " " TO INPFT2CL
```

```
STORE "  " TO INRFLQU
STORE "  " TO INPSTQU


@ 1,12 GET INNAME PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"
@ 1,51 GET INRANK PICTURE "XX"
@ 1,60 GET INPRIMEM PICTURE "9999"
@ 1,67 GET INSECMOS PICTURE "9999"
@ 2,22 GET INBRTH PICTURE "XXXXXX"
@ 2,48 GET INSSN PICTURE "999999999"
@ 3,10 GET INCOMP PICTURE "XXXXXX"
@ 3,22 GET INPLAT PICTURE "XXXXXXXXX"
@ 3,37 GET INJNDATE PICTURE "XXXXXX"
@ 3,50 GET INEAS PICTURE "XXXXXX"
@ 3,68 GET INGAS PICTURE "X"
@ 4,27 GET INCODE PICTURE "XXX"
@ 4,50 GET INPFT1 PICTURE "999"
@ 4,65 GET INPFTDT1 PICTURE "XXXXXX"
@ 5,27 GET INHIS PICTURE "XXX"
@ 5,50 GET INPFT2 PICTURE "999"
@ 5,65 GET INPFTDT2 PICTURE "XXXXXX"
@ 6,27 GET INDRILL PICTURE "XXX"
@ 6,47 GET INNBC PICTURE "XXXXXX"
@ 7,27 GET ININT PICTURE "XXX"
@ 7,58 GET INMKS PICTURE "XXXXXX"
@ 8,27 GET INAID PICTURE "XXXXXXXXXXX"
@ 9,27 GET INUNI PICTURE "XXX"
@ 9,58 GET INTAC PICTURE "XXXXX"
@ 11,19 GET INSWQU PICTURE "XX"
@ 11,28 GET INSWDT PICTURE "XXXXXX"
@ 12,20 GET INRFLSC PICTURE "999"
@ 12,35 GET INRFLDT PICTURE "XXXXXX"
@ 12,58 GET INWEIGHT PICTURE "999"
@ 13,20 GET INPSTSC PICTURE "999"
@ 13,35 GET INPSTDT PICTURE "XXXXXX"
@ 13,58 GET INHGHT PICTURE "99"
@ 15,28 GET INELEC PICTURE "XXXXXX"
@ 15,58 GET INDRUG PICTURE "XXXXXX"
@ 16,28 GET INCLDWTR PICTURE "XXXXXX"
@ 16,58 GET INALCH PICTURE "XXXXXX"
@ 17,28 GET INLAW PICTURE "XXXXXX"
@ 17,58 GET INHUM PICTURE "XXXXXX"
@ 18,28 GET INMOS PICTURE "XXXX"
@ 18,58 GET INPERSAF PICTURE "XXXXXX"
@ 19,28 GET INLDB PICTURE "XXXXXX"
@ 19,58 GET INUCMJ PICTURE "XXXXXX"
@ 20,28 GET INCHRMOR PICTURE "XXXXXX"
@ 21,16 GET INCOMMNT PICTURE "X"

READ
STORE INSSN TO AASSN
STORE 1 TO ERROPT
DO WHILE ERROPT < 17
   @ 24,0 SAY "
   @ 24,1 SAY " ERROR CHECKING IN PROGRESS"
   DO ERROR
   STORE (ERROPT + 1) TO ERROPT
ENDDO
IF INCOMMNT
   SAVE TO A:INFILE ALL LIKE IN??????
   RELEASE ALL LIKE IN??????
   RELEASE ALL EXCEPT AA??????
   DO CRTCMMNT
   DO WRTCMMNT
   RESTORE FROM A:INFILE ADDITIVE
   DO ITFSCRN
@ 1,13 SAY INNAME
@ 1,52 SAY INRANK
```

```
@ 1,61 SAY INPRIMEM
@ 1,68 SAY INSECMOS
@ 2,23 SAY INBRTH
@ 2,49 SAY INSSN
@ 3,11 SAY INCOMP
@ 3,23 SAY INPLAT
@ 3,38 SAY INJNDATE
@ 3,51 SAY INEAS
@ 3,69 SAY INGAS
@ 4,28 SAY INCODE
@ 4,51 SAY INPFT1 USING "999"
@ 4,66 SAY INPFTDT1
@ 5,28 SAY INHIS
@ 5,51 SAY INPFT2 USING "999"
@ 5,66 SAY INPFTDT2
@ 6,28 SAY INDRILL
@ 6,48 SAY INNBC
@ 7,28 SAY ININT
@ 7,59 SAY INMKS
@ 8,28 SAY INAID
@ 9,28 SAY INUNI
@ 9,59 SAY INTAC
@ 11,20 SAY INSWQU
@ 11,29 SAY INSWDT
@ 12,21 SAY INRFLSC
@ 12,36 SAY INRFLDT
@ 12,59 SAY INWEIGHT
@ 13,21 SAY INPSTSC
@ 13,36 SAY INPSTDT
@ 13,59 SAY INHGHT
@ 15,29 SAY INELEC
@ 15,59 SAY INDRUG
@ 16,29 SAY INCLDWTR
@ 16,59 SAY INALCH
@ 17,29 SAY INLAW
@ 17,59 SAY INHUM
@ 18,29 SAY INMOS
@ 18,59 SAY INPERSAF
@ 19,29 SAY INLDR
@ 19,59 SAY INUCMJ
@ 20,29 SAY INCHRMOR
@ 21,17 SAY INCOMMNT
ENDIF
@ 24,1 SAY "STORING DATA IN THE SYSTEM ON DISK"
USE A:PERS INDEX A:PERSSN, A:ALPHPERS, A:MOSNDX
APPEND BLANK
REPLACE NAME WITH !(INNAME)
REPLACE SSN WITH INSSN
REPLACE RANK WITH INRANK, PRIMEMOS WITH INPRIMEM
REPLACE SECMOS WITH INSECMOS, COMPANY WITH !(INCOMP)
REPLACE PLATOON WITH !(INPLAT), JOINDATE WITH INJNDATE
REPLACE EAS WITH INEAS, BRTHDATE WITH INBRTH
REPLACE COMMENT WITH INCOMMNT
REPLACE HEIGHT WITH INHGHT, WEIGHT WITH INWEIGHT
REPLACE WTCONT WITH INWTCONT, GASMASK WITH !(INGAS)

USE B:EST INDEX B:ESTSSN
APPEND BLANK
REPLACE SSN WITH INSSN, COC WITH !(INCODE)
REPLACE HIS WITH !(INHIS), COD WITH !(INDRILL)
REPLACE INT WITH !(ININT), AID WITH !(INAID)
REPLACE UNI WITH !(INUNI)
REPLACE PFT1RAW WITH INPFT1, PFT1DATE WITH INPFTDT1
REPLACE PFT2RAW WITH INPFT2, PFT2DATE WITH INPFTDT2
REPLACE NBC WITH !(INNBC)
REPLACE MKS WITH !(INMKS),TAC WITH !(INTAC)

USE B:QUAL INDEX B:QUALSSN
APPEND BLANK
```

```
REPLACE SSN WITH INSSN, SWIMQUAL WITH !(INSWQU)
REPLACE SWIMDATE WITH INSWDT, RFLDATE WITH INRFLDT
REPLACE RFLSCORE WITH INRFLSC
REPLACE PSTSCORE WITH INPSTSC
REPLACE PSTDATE WITH INPSTDT

USE B:INFOMISC INDEX B:INFOSSN
APPEND BLANK
REPLACE SSN WITH INSSN, ELECWAR WITH !(INELEC)
REPLACE CLDWTHR WITH !(INCLDWTR)
REPLACE LAWWAR WITH !(INLAW), MOS WITH !(INMOS)
REPLACE DRUG WITH !(INDRUG), LDRSHP WITH INLDR
REPLACE ALCOHOL WITH !(INALCH), HUMREL WITH !(INHUM)
REPLACE PERSAFFR WITH !(INPERSAF), UCMJ WITH !(INUCMJ)
REPLACE CHRMORED WITH !(INCHRMOR)
STORE 1 TO CALCOPT
DO WHILE CALCOPT < 6
   DO CALCULAT
   STORE (CALCOPT + 1) TO CALCOPT
ENDDO

RELEASE ALL EXCEPT AA??????
ERASE
STORE AASSN TO VSSN
DO ITRSCRN
DO GETDATA

STORE F TO INDONE
DO WHILE .NOT. INDONE
   ACCEPT "IS THIS DATA CORRECT (Y/N)?" TO INAGAIN
   DO CASE
      CASE !(INAGAIN) = 'Y'
         STORE T TO INDONE
      CASE !(INAGAIN) = 'N'
         DO UPDATA
         STORE T TO INDONE
   ENDCASE
ENDDO
RELEASE ALL EXCEPT AA??????
RETURN
```

J. DATA ERROR CHECKING ROUTINE

```
* Routine Name: Error.prg
* Module Name: Maintenance Module
* Version: 6.3.1.1
* Author: D.P. Haeusler
* Date: 2 Dec 83
* Variables Used: aadate, in*,
* Variables Modified: in*
* Variables Created: inerror
* Variables Released: none
* Files (opened/closed): none
* Temporary Files Created: none
* Using Subroutines: Creatitr.prg, updata.prg
* Description: This routine does the error checing for the
* information entered in each of the appropriate fields.
* This error checking is not very extensive because this is
* aprototype system but can be increased if the need
* arises.

STORE AADATE TO INDATE
STORE T TO INERROR
DO WHILE INERROR
   STORE F TO INERROR
   DO CASE
      CASE ERROPT = 1
         IF .NOT. ($(INRANK,1,1) = 'E' .OR. $(INRANK,1,1);
            = W .OR. $(INRANK,1,1) = 'O')
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY "IMPROPER GRADE -- REENTER"
            @ 1,51 GET INRANK PICTURE "X9"
            READ
         ENDIF
      CASE ERROPT = 2
         IF .NOT. (VAL($(INBRTH,1,2)) < 31 .AND.
            VAL($(INBRTH,3,2)) < 13 .AND.;
            VAL($(INBRTH,5,2)) < VAL($(INDATE,5,2)))
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY " IMPROPER DATE --REENTER"
            @ 2,22 GET INBRTH PICTURE "999999"
            READ
         ENDIF
      CASE ERROPT = 3
         IF .NOT. (VAL($(INJNDATE,1,2)) < 31 .AND.;
            VAL($(INJNDATE,3,2)) < 13 .AND.
            VAL($(INJNDATE,5,2)) <= VAL($(INDATE,5,2)))
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY " IMPROPER DATE -- REENTER"
            @ 3,37 GET INJNDATE PICTURE "999999"
            READ
         ENDIF
      CASE ERROPT = 4
         IF .NOT (!(INGAS) = 'S' .OR. !(INGAS) = 'M' .OR.;
            !(INGAS) = 'L')
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY " IMPROPER GAS MASK SIZE -- REENTER"
            @ 3,68 GET INGAS PICTURE "X"
            READ
         ENDIF
      CASE ERROPT = 5
         IF .NOT. (INPFT1 < 301)
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY "IMPROPER PFT SCORE -- REENTER"
```

```
      @ 4,50 GET INPFT1 PICTURE "999"
      READ
   ENDIF
CASE ERROPT = 6
   IF .NOT. (VAL($(INPFTDT1,1,2)) < 31 .AND.;
      VAL($(INPFTDT1,3,2)) < 13 .AND.;
      VAL($(INPFTDT1,5,2)) = VAL($(INDATE,5,2)) .OR.;
      INPFTDT1 = 'DDMMYY')
      STORE T TO INERROR
      @ 24,0 SAY "
      @ 24,1 SAY " IMPROPER PFT DATE -- REENTER"
      @ 4,65 GET INPFTDT1 PICTURE "999999"
      READ
   ENDIF
CASE ERROPT = 7
   IF .NOT. (INPFT2 < 301)
      STORE T TO INERROR
      @ 24,0 SAY "
      @ 24,1 SAY "IMPROPER PFT SCORE -- REENTER"
      @ 5,50 GET INPFT2 PICTURE "999"
      READ
   ENDIF
CASE ERROPT = 8
   IF .NOT. (VAL($(INPFTDT2,1,2)) < 31 .AND.;
      VAL($(INPFTDT2,3,2) < 13 .AND.;
      VAL($(INPFTDT2,5,2)) = VAL($(INDATE,5,2)) .OR.;
      INPFTDT2 = 'DDMMYY')
      STORE T TO INERROR
      @ 24,0 SAY "
      @ 24,1 SAY " IMPROPER PFT DATE -- REENTER"
      @ 5,65 GET INPFTDT2 PICTURE "999999"
      READ
   ENDIF
CASE ERROPT = 9
   IF .NOT. ($(INSWQU,1,1) ='S' .OR. $(INSWQU,1,1);
      = 's' .OR. INSWQU = 'WQ' .OR. INSWQU = 'wq')
      STORE T TO INERROR
      @ 24,0 SAY "
      @ 24,1 SAY " IMPROPER ENTRY -- REENTER"
      @ 11,19 GET INSWQU PICTURE "XX"
      READ
   ENDIF
CASE ERROPT = 10
   IF .NOT. (VAL($(INSWDT,1,2)) < 31 .AND.;
      VAL($(INSWDT,3,2)) < 13 .AND.;
      VAL($(INSWDT,5,2)) <= VAL($(INDATE,5,2)) .OR.;
      INSWDT = 'DDMMYY')
      STORE T TO INERROR
      @ 24,0 SAY "
      @ 24,1 SAY " IMPROPER DATE -- RENTER"
      @ 11,28 GET INSWDT PICTURE "999999"
      READ
   ENDIF
CASE ERROPT = 11
   IF .NOT. (INRFLSC < '251')
      STORE T TO INERROR
      @ 24,0 SAY "
      @ 24,1 SAY "IMPROPER RIFLE SCORE --- REENTER"
      @ 12,20 GET INRFLSC PICTURE "999"
      READ
   ENDIF
CASE ERROPT = 12
   IF .NOT. (VAL($(INRFLDT,1,2)) < 31 .AND.;
      VAL($(INRFLDT,3,2)) < 13 .AND.;
      VAL($(INRFLDT,5,2)) <= VAL($(INDATE,5,2)) .OR.;
      INRFLDT = 'DDMMYY')
      STORE T TO INERROR
      @ 24,0 SAY "
      @ 24,1 SAY "IMPROPER DATE -- REENTER"
```

```
            @ 12,35 GET INRFLDT PICTURE "999999"
            READ
         ENDIF
      CASE ERROPT = 13
         IF INWEIGHT > '300' .OR. INWEIGHT < '070'
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY " IMPROPER WEIGHT -- REENTER"
            @ 12,58 GET INWEIGHT PICTURE "999"
            READ
         ENDIF
      CASE ERROPT = 14
         IF .NOT. (INPSTSC < '301')
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY " IMPROPER PISTOL SCORE -- REENTER"
            @ 13,20 GET INPSTSC PICTURE "999"
            READ
         ENDIF
      CASE ERROPT = 15
         IF .NOT. (VAL ($(INPSTDT,1,2)) < 31 .AND.;
            VAL($(INPSTDT,3,2)) < 13 .AND.;
            VAL($(INPSTDT,5,2)) <= VAL($(INDATE,5,2)) .OR.;
            INPSTDT = 'DDMMYY' )
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY "IMPROPER DATE -- REENTER"
            @ 13,35 GET INPSTDT PICTURE "999999"
            READ
         ENDIF
      CASE ERROPT = 16
         IF .NOT. (INHGHT < '78' .AND. INHGHT > '64')
            STORE T TO INERROR
            @ 24,0 SAY "
            @ 24,1 SAY "IMPROPER HEIGHT -- REENTER"
            @ 13,58 GET INHGHT PICTURE "99"
            READ
         ENDIF
   ENDCASE
ENDDO
RETURN
```

K. CALCULATION ROUTINE

```
* Routine Name: Calculat.prg
* Module Name: Maintenance Module
* Version: 6.3.1.2
* Author: D.P. Haeusler
* Date: 2 Dec 83
* Variables Used: calcopt, aassn, aadate, brthdate, age,
*                 mm, in*
* Variables Modified: age, mm, in*
* Variables Created: age, mm, in*
* Variables Released: all except aa??????
* Files (c/c): a:pers(o/c), b:qual(o/c), b:est(o/c)
* Temporary Files Created: none
* Using Subroutines: Updata.prg, indata.prg
* Description: This routine does the calculations that are
* triggered by the entry of data into certain fields of the
* ITR.  These calculations reconstruct the tables found in
* the training orders.

DO CASE
   CASE CALCOPT = 1
      USE A:PERS INDEX A:PERSSN
      FIND &AASSN
      IF INPFT1 > 0
         STORE (VAL($(AADATE,5,2)) -;
         (VAL($(BRTHDATE,5,2)))) TO AGE
         STORE (VAL($(AADATE,3,2)) -;
         (VAL($(BRTHDATE,3,2)))) TO MM
         IF MM < 0
            STORE AGE - 1 TO AGE
         ENDIF
         USE B:EST INDEX B:ESTSSN
         FIND &AASSN
         IF PFT1RAW >= 285
            STORE 'S' TO INPFT1CL
            REPLACE PFT1CLSS WITH INPFT1CL
            @ 4,57 SAY INPFT1CL
            RELEASE INPFT1CL
            USE
         ELSE
            IF AGE <= 26
               STORE PFT1RAW TO IPFT1RAW
            ENDIF
            IF AGE < 40 .AND. AGE > 26
               STORE (PFT1RAW + 25) TO IPFT1RAW
            ENDIF
            IF AGE > 39
               STORE (PFT1RAW + 50) TO IPFT1RAW
            ENDIF
            IF IPFT1RAW <=  134
               STORE 'U' TO INPFT1CL
               REPLACE PFT1CLSS WITH INPFT1CL
               @ 4,57 SAY INPFT1CL
               RELEASE INPFT1CL
               USE
            ENDIF
            IF IPFT1RAW <= 174 .AND. IPFT1RAW > 134
               STORE '3' TO INPFT1CL
               REPLACE PFT1CLSS WITH INPFT1CL
               @ 4,57 SAY INPFT1CL
               RELEASE INPFT1CL
               USE
            ENDIF
            IF IPFT1RAW <= 224 .AND. IPFT1RAW > 174
               STORE '2' TO INPFT1CL
               REPLACE PFT1CLSS WITH INPFT1CL
               @ 4,57 SAY INPFT1CL
```

```
            RELEASE INPFT1CL
            USE
         ENDIF
         IF IPFT1RAW > 224
            STORE '1' TO INPFT1CL
            REPLACE PFT1CLSS WITH INPFT1CL
            @ 4,57 SAY INPFT1CL
            RELEASE INPFT1CL
            USE
         ENDIF
      ENDIF
   ENDIF
CASE CALCOPT = 2
   USE A:PERS INDEX A:PERSSN
   FIND &AASSN
   IF INPFT2 > 0
      STORE  (VAL($(AADATE,5,2))  -;
      VAL($(BRTHDATE,5,2))) TO AGE
      STORE  (VAL($(AADATE,3,2))  -;
      VAL($(BRTHDATE,3,2))) TO MM
      IF MM < 0
         STORE AGE - 1 TO AGE
      ENDIF
      USE B:EST INDEX B:ESTSSN
      FIND &AASSN
      IF PFT2RAW >= 285
         STORE 'S' TO INPFT2CL
         REPLACE PFT2CLSS WITH INPFT2CL
         @ 5,57 SAY INPFT2CL
         RELEASE INPFT2CL
         USE
      ELSE
         IF AGE <= 26
            STORE PFT2RAW TO IPFT2RAW
         ENDIF
         IF AGE < 40 .AND. AGE > 26
            STORE (PFT2RAW + 25) TO IPFT2RAW
         ENDIF
         IF AGE > 39
            STORE (PFT2RAW + 50) TO IPFT2RAW
         ENDIF
         IF IPFT2RAW <=  134
            STORE 'U' TO INPFT2CL
            REPLACE PFT2CLSS WITH INPFT2CL
            @ 5,57 SAY INPFT2CL
            RELEASE INPFT2CL
            USE
         ENDIF
         IF IPFT2RAW <= 174 .AND. IPFT2RAW > 134
            STORE '3' TO INPFT2CL
            REPLACE PFT2CLSS WITH INPFT2CL
            @ 5,57 SAY INPFT2CL
            RELEASE INPFT2CL
            USE
         ENDIF
         IF IPFT2RAW <= 224 .AND. IPFT2RAW > 174
            STORE '2' TO INPFT2CL
            REPLACE PFT2CLSS WITH INPFT2CL
            @ 5,57 SAY INPFT2CL
            RELEASE INPFT2CL
            USE
         ENDIF
         IF IPFT2RAW > 224
            STORE '1' TO INPFT2CL
            REPLACE PFT2CLSS WITH INPFT2CL
            @ 5,57 SAY INPFT2CL
            RELEASE INPFT2CL
            USE
         ENDIF
```

```
      ENDIF
   ENDIF
CASE CALCOPT = 3
   USE B:QUAL INDEX B:QUALSSN
   FIND &AASSN
   IF RFLSCORE > '0'
      IF RFLSCORE < '190'
         STORE 'UN' TO INRFLQU
         REPLACE RFLQUAL WITH INRFLQU
         @ 12,27 SAY INRFLQU
         RELEASE INRFLQU
      ENDIF
      IF RFLSCORE < '210' .AND. RFLSCORE >= '190'
         STORE 'MM' TO INRFLQU
         REPLACE RFLQUAL WITH INRFLQU
         @ 12,27 SAY INRFLQU
         RELEASE INRFLQU
      ENDIF
      IF RFLSCORE < '220' .AND. RFLSCORE >= '210'
         STORE 'SS' TO INRFLQU
         REPLACE RFLQUAL WITH INRFLQU
         @ 12,27 SAY INRFLQU
         RELEASE INRFLQU
      ENDIF
      IF RFLSCORE >= '220'
         STORE 'EX' TO INRFLQU
         REPLACE RFLQUAL WITH INRFLQU
         @ 12,27 SAY INRFLQU
         RELEASE INRFLQU
      ENDIF
      USE
   ENDIF
CASE CALCOPT = 4
   USE B:QUAL INDEX B:QUALSSN
   FIND &AASSN
   IF PSTSCORE > '0'
      IF PSTSCORE < '180'
         STORE 'UN' TO INPSTQU
         REPLACE PSTQUAL WITH INPSTQU
         @ 13,27 SAY INPSTQU
         RELEASE INPSTQU
      ENDIF
      IF PSTSCORE < '210' .AND. PSTSCORE >= '180'
         STORE 'MM' TO INPSTQU
         REPLACE PSTQUAL WITH INPSTQU
         @ 13,27 SAY INPSTQU
         RELEASE INPSTQU
      ENDIF
      IF PSTSCORE < '250' .AND. PSTSCORE >= '210'
         STORE 'SS' TO INPSTQU
         REPLACE PSTQUAL WITH INPSTQU
         @ 13,27 SAY INPSTQU
         RELEASE INPSTQU
      ENDIF
      IF PSTSCORE >= '250'
         STORE 'EX' TO INPSTQU
         REPLACE PSTQUAL WITH INPSTQU
         @ 13,27 SAY INPSTQU
         RELEASE INPSTQU
      ENDIF
      USE
   ENDIF
CASE CALCOPT = 5
   USE A:PERS INDEX A:PERSSN
   FIND &AASSN
   STORE T TO INWTCONT
   IF HEIGHT = '64' .AND. WEIGHT <= '160' .AND.;
      WEIGHT >= '105'
      STORE F TO INWTCONT
```

```
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '65' .AND. WEIGHT <= '165' .AND.;
   WEIGHT >= '106'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '66' .AND. WEIGHT <= '170' .AND.;
   WEIGHT >= '107'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '67' .AND. WEIGHT <= '175' .AND.;
   WEIGHT >= '111'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '68' .AND. WEIGHT <= '181' .AND.;
   WEIGHT >= '115'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '69' .AND. WEIGHT <= '186' .AND.;
   WEIGHT >= '119'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '70' .AND. WEIGHT <= '192' .AND.;
   WEIGHT >= '123'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '71' .AND. WEIGHT <= '197' .AND.;
   WEIGHT >= '127'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '72' .AND. WEIGHT <= '203' .AND.;
   WEIGHT >= '131'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '73' .AND. WEIGHT <= '209' .AND.;
   WEIGHT >= '135'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '74' .AND. WEIGHT <= '214' .AND.;
   WEIGHT >= '139'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
IF HEIGHT = '75' .AND. WEIGHT <= '219' .AND.;
   WEIGHT >= '143'
   STORE F TO INWTCONT
   REPLACE WTCCNT WITH INWTCONT
   @ 11,59 SAY INWTCONT
ENDIF
```

```
      IF HEIGHT = '76' .AND. WEIGHT <= '225' .AND.;
         WEIGHT >= '147'
         STORE F TO INWTCONT
         REPLACE WTCONT WITH INWTCONT
         @ 11,59 SAY INWTCONT
      ENDIF
      IF HEIGHT = '77' .AND. WEIGHT <= '230' .AND.;
         WEIGHT >= '151'
         STORE F TO INWTCONT
         REPLACE WTCONT WITH INWTCONT
         @ 11,59 SAY INWTCONT
      ENDIF
      IF HEIGHT = '78' .AND. WEIGHT <= '235' .AND.;
         WEIGHT >= '153'
         STORE F TO INWTCONT
         REPLACE WTCONT WITH INWTCONT
         @ 11,59 SAY INWTCONT
      ENDIF
      IF INWTCONT
         REPLACE WTCONT WITH INWTCONT
         @ 11,59 SAY INWTCONT
      ENDIF
      USE
   ENDCASE
RETURN
```

L. COMMENT UPDATE ROUTINE

```
* Routine Name: Wrtcmmnt.prg
* Module Name: Maintenance Module
* Version: 6.3.1.3
* Author: D.P. Haeusler
* Date: 19 Jan 84
* Variables Used: aassn, intxt*
* Variables Modified: intxt*
* Variables Created: intxt*
* Variables Released: all like intxt*
* Files (opened/closed): a:cmmnt (o/c)
* Temporary Files Created: none
* Using Subroutines: indata.prg, updata.prg
* Description: This routine updates the information stored
* in the data base on an individual.

ERASE
@ 5,33 SAY "COMMENT SECTION"
USE A:CMMNT INDEX A:CMMNTSSN
FIND &AASSN
IF .NOT. # = 0
@ 8,2 SAY INFOTXT1
@ 8,51 SAY INFOTXT2
@ 9,2 SAY INFOTXT3
@ 9,51 SAY INFOTXT4
@ 10,2 SAY INFOTXT5
@ 10,51 SAY INFOTXT6
@ 11,2 SAY INFOTXT7
@ 11,51 SAY INFOTXT8
@ 12,2 SAY INFOTXT9
@ 12,51 SAY INFOTXT0
STORE INFOTXT1 TO INTXT1
STORE INFOTXT2 TO INTXT2
STORE INFOTXT3 TO INTXT3
STORE INFOTXT4 TO INTXT4
STORE INFOTXT5 TO INTXT5
STORE INFOTXT6 TO INTXT6
STORE INFOTXT7 TO INTXT7
STORE INFOTXT8 TO INTXT8
STORE INFOTXT9 TO INTXT9
STORE INFOTXT0 TO INTXT0
@ 8,1 GET INTXT1 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 8,50 GET INTXT2 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 9,1 GET INTXT3 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 9,50 GET INTXT4 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 10,1 GET INTXT5 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 10,50 GET INTXT6 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 11,1 GET INTXT7 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 11,50 GET INTXT8 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 12,1 GET INTXT9 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
@ 12,50 GET INTXT0 PICTURE "XXXXXXXXXXXXXXXXXXXXXXXXX"
READ
REPLACE INFOTXT1 WITH INTXT1
REPLACE INFOTXT2 WITH INTXT2
REPLACE INFOTXT3 WITH INTXT3
REPLACE INFOTXT4 WITH INTXT4
REPLACE INFOTXT5 WITH INTXT5
REPLACE INFOTXT6 WITH INTXT6
REPLACE INFOTXT7 WITH INTXT7
REPLACE INFOTXT8 WITH INTXT8
REPLACE INFOTXT9 WITH INTXT9
REPLACE INFOTXT0 WITH INTXT0
ENDIF
USE
RELEASE ALL LIKE INTXT?
RETURN
```

M. COMMENT CREATION ROUTINE

```
* Routine Name: Crtcmmnt.prg
* Module Name: Maintenance Module
* Version: 6.3.1.4
* Author: D.P. Haeusler
* Date: 10 Jan 84
* Variables Used: newtext, aassn
* Variables Modified: newtext
* Variables Created: newtext
* Variables Released: newtext
* Files (opened/closed): a:cmmnt (o/c)
* Temporary Files Created: none
* Using Subroutines: indata.prg, updata.prg
* Description: This routine creates a comment data base
* file for the individual that corresponds to the aassn.
* This file when created has 10 fields of 25 characters
* each and is filled with asterisks.

STORE "*************************" TO NEWTXT
USE A:CMMNT INDEX A:CMMNTSSN
APPEND BLANK
REPLACE SSN WITH AASSN, INFOTXT1 WITH NEWTXT
REPLACE INFOTXT2 WITH NEWTXT, INFOTXT3 WITH NEWTXT
REPLACE INFOTXT5 WITH NEWTXT, INFOTXT6 WITH NEWTXT
REPLACE INFOTXT7 WITH NEWTXT, INFOTXT8 WITH NEWTXT
REPLACE INFOTXT9 WITH NEWTXT, INFOTXT0 WITH NEWTXT
REPLACE INFOTXT4 WITH NEWTXT
USE
RELEASE NEWTXT
RETURN
```

N. DELETE ITR ROUTINE

```
* Routine Name: Deletitr.prg
* Module Name: Maintenance Module
* Version: 6.4.0
* Author: D.P. Haeusler
* Date: 20 Jan 84
* Variables Used: del*, aassn
* Variables Modified: del*, aassn
* Variables Created: del*
* Variables Released: del*
* Files (opened/closed): a:pers(o/c), b:est(o/c),
                         b:qual(c/c), b:infomisc(o/c)
* Temporary Files Created: none
* Using Subroutines: Maintain.prg
* Description: This routine deletes records in the data
* base.  It first checks to see if the record is in the
* data base, displays the record, queries the user if this
* is the record to be deleted, and deletes the record.

STORE F TO DELFINI
DO WHILE .NOT. DELFINI
   ERASE
   @ 12,30 SAY "ITR TO BE DELETED"
   ACCEPT "       NAME (LAST, FIRST MI.)====>" TO DELNAME
   USE A:PERS INDEX A:ALPHPERS, A:PERSSN, A:MOSNDX
   FIND &DELNAME
   IF .NOT. # = 0
      STORE SSN TO AASSN
      DO ITRSCRN
      DO GETDATA
      STORE F TO DELTHRU
      DO WHILE .NOT. DELTHRU
         @ 23,0 SAY " IS THIS ITR TO BE DELETED? "
         ACCEPT " ENTER YES OR NO =====>" TO DELCHK
         IF !(DELCHK) = 'NO'
            STORE T TO DELTHRU
         ELSE
            IF !(DELCHK) = 'YES'
               ERASE
               @ 12,30 SAY "DELETING ITR"
               STORE T TO DELTHRU
               USE A:PERS INDEX A:ALPHPERS, A:PERSSN,;
               A:MOSNDX
               FIND &AASSN
               IF .NOT. # = 0
                  DELETE
                  PACK
               ENDIF
               USE A:CMMNT INDEX A:CMMNTSSN
               FIND &AASSN
               IF .NOT. # = 0
                  DELETE
                  PACK
               ENDIF
               USE B:QUAL INDEX B:QUALSSN
               FIND &AASSN
               IF .NOT. # = 0
                  DELETE
                  PACK
               ENDIF
               USE B:EST INDEX B:ESTSSN
               FIND &AASSN
               IF .NOT. # = 0
                  DELETE
                  PACK
               ENDIF
               USE B:INFOMISC INDEX A:INFOSSN
```

```
               FIND &AASSN
               IF .NOT. # = 0
                  DELETE
                  PACK
               ENDIF
            ENDIF
         ENDIF
      ENDDO
   ENDIF
   STORE F TO DELDONE
   DO WHILE .NOT. DELDONE
      ERASE
      @ 12,20 SAY " DO YOU WANT TO DELETE ANOTHER RECORD? "
      ACCEPT "      ENTER YES OR NO ========> " TO DELCHK
      IF !(DELCHK) = 'NO'
         STORE T TO DELDONE
         STORE T TO DELFINI
      ELSE
         IF !(DELCHK) = 'YES'
            STORE T TO DELDONE
         ENDIF
      ENDIF
   ENDDO
ENDDO
RELEASE ALL EXCEPT AA??????
RETURN
```

C. SYSTEM FUNCTION CONTROL ROUTINE

```
* Routine Name: System.prg
* Module Name: Maintenance Module
* Version: 6.5.0
* Author: D.P. Haeusler
* Date: 30 Jan 1984
* Variables Used: aacomple, sysopt
* Variables Modified: aacomple, sysopt
* Variables Created: aacomple, sysopt
* Variables Released: aacomple, sysopt
* Files (opened/closed): none
* Temporary Files Created: none
* Using Subroutines: Maintain.prg
* Description: This module creates the menu for all the
* system function modifications. It is a restricted module
* and can only be accessed by a user with a authorization
* level of 1.  The module then can choose the appropriate
* subroutine corresponding to the option selected.

STORE F TO AACOMPLE
DO WHILE .NOT. AACOMPLE
   ERASE
   @ 6,29 SAY " SYSTEM FUNCTION MENU "
   @ 8,24 SAY " SELECT ONE OF THE FOLLOWING OPTIONS"
   @ 10,31 SAY "I...INSTALL SYSTEM"
   @ 11,31 SAY "S...SYSTEM RESET (YEARLY)"
   @ 12,31 SAY "A...ACCESS LIST MAINTENANCE"
   @ 13,31 SAY "Q...QUIT TO MAINTENCE MENU"
   ACCEPT "       ENTER OPTION ===>" TO SYSOPT
   DO CASE
      CASE !(SYSOPT) = "I"
         STORE F TO AACOMPLE
         DO B:INSTALL
      CASE !(SYSOPT) = "S"
         STORE F TO AACOMPLE
         DO B:SYSRESET
      CASE !(SYSOPT) = "A"
         STORE F TO AACOMPLE
         DO B:RSTACCSS
      CASE !(SYSOPT) = "Q"
         STORE T TO AACOMPLE
   ENDCASE
ENDDO
RELEASE ALL EXCEPT AA??????
RELEASE AACOMPLE
RETURN
```

E. SYSTEM INSTALLATION ROUTINE

```
* Routine Name: Install.prg
* Module Name: Maintenance Module
* Version: 6.5.1
* Author: D.P. Haeusler
* Date: 7 Feb 84
* Variables Used: *co, *plt, crntyr
* Variables Modified: *co, *plt, crntyr
* Variables Created: none
* Variables Released: all
* Files (opened/closed): a:unitmem.mem, a:memdisk.mem
* Temporary Files Created: temp.mem
* Using Subroutines: System.prg
* Description: This routine stores the appropriate values
* in the memory files that the system uses to describe the
* units that are in the battalion.  It also establishes
* the current year that is used for error checking and
* calculations

SAVE TO TEMP
RELEASE ALL
ERASE
RESTORE FROM A:UNITMEM
@ 3,30 SAY "SYSTEM INSTALLATION"
@ 5,15 SAY "ENTER THE NAMES OF YOUR COMPANY SIZE UNITS"
@ 7,15 SAY "COMPANY/BATTERY #1"
@ 7,34 GET ONECO PICTURE "XXXXXX"
@ 8,15 SAY "COMPANY/BATTERY #2"
@ 8,34 GET TWOCO PICTURE "XXXXXX"
@ 9,15 SAY "COMPANY/BATTERY #3"
@ 9,34 GET THREECO PICTURE "XXXXXX"
@ 10,15 SAY "COMPANY/BATTERY #4"
@ 10,34 GET FOURCO PICTURE "XXXXXX"
READ
STORE !(ONECO) TO ONECO
STORE !(TWOCO) TO TWOCO
STORE !(THREECO) TO THREECO
STORE !(FOURCO) TO FOURCO
ERASE
@ 3,30 SAY "SYSTEM INSTALLATION"
@ 5,15 SAY "ENTER THE NAMES OF PLATOON SIZED UNITS"
@ 7,15 SAY "PLATOON #1"
@ 7,26 GET ONEPLT PICTURE "XXXXXXXXX"
@ 8,15 SAY "PLATOON #2"
@ 8,26 GET TWOPLT PICTURE "XXXXXXXXX"
@ 9,15 SAY "PLATOON #3"
@ 9,26 GET THREEPLT PICTURE "XXXXXXXXX"
@ 10,15 SAY "PLATOON #4"
@ 10,26 GET FOURPLT PICTURE "XXXXXXXXX"
READ
STORE !(ONEPLT) TO ONEPLT
STORE !(TWOPLT) TO TWOPLT
STORE !(THREEPLT) TO THREEPLT
STORE !(FOURPLT) TO FOURPLT
SAVE TO UNITMEM
ERASE
RELEASE ALL
RESTORE FROM A:MEMDISK
@ 12,25 SAY "ENTER THE CURRENT YEAR"
ACCEPT "                    YEAR (YY) ===>" TO CRNTYR
SAVE TO A:MEMDISK
RELEASE ALL
RESTORE FROM TEMP
RETURN
```

Q. SYSTEM RESET ROUTINE

```
* Routine Name: Sysreset.prg
* Module Name: Maintenance Module
* Version: 6.5.2
* Author: D.P. Haeusler
* Date: 4 Feb 84
* Variables Used: crntyr, reset, rgreset, done, q*, *co
* Variables Modified: crntyr, reset, rgreset, done, q*, *co
* Variables Created: reset, rgreset, done
* Variables Released: all
* Files (opened/closed): a:memdisk.mem, a:unitmem.mem,
* Temporary Files Created: temp.mem
* Using Subroutines: System.prg
* Description: This routine sets all the values to the
* default value for the fields that are reset yearly.  The
* information is then stored in the data base for each
* individual.  It also stores the yearly projections on
* the range quotas to a memory file that can be recalled by
* routines that use these values for calculations.

SAVE TO TEMP
RELEASE ALL
RESTORE FROM A:MEMDISK ADDITIVE
ERASE
@ 10,15 SAY "ENTER THE CURRENT YEAR"
ACCEPT "                YEAR (YY) ===>" TO CRNTYR
SAVE TO A:MEMDISK
RELEASE ALL
STORE F TO DONE
DO WHILE .NOT. DONE
   ERASE
   @ 10,15 SAY "DO YOU WANT TO RESET RANGE QUOTAS FOR;
THE YEAR?"
   ACCEPT "             ENTER (Y OR N) ====>" TO RESET
   IF !(RESET) = 'Y'
      STORE T TO DONE
      STORE T TO RGRESET
   ELSE
      IF !(RESET) = 'N'
         STORE T TO DONE
         STORE F TO RGRESET
      ENDIF
   ENDIF
ENDDO
IF RGRESET
   ERASE
   RESTORE FROM A:ARNGQTAS
   RESTORE FROM A:UNITMEM ADDITIVE
   @ 3,15 SAY "ENTER RANGE QUOTAS AS PROJECTED,;
FOR THE YEAR,"
   @ 4,15 SAY "FOR UNIT: "
   @ 4,25 SAY CNECO
   @ 6,15 SAY "JANUARY"
   @ 6,23 GET QJAN PICTURE "999"
   @ 7,15 SAY "FEBRUARY"
   @ 7,24 GET QFEB PICTURE "999"
   @ 8,15 SAY "MARCH"
   @ 8,21 GET QMAR PICTURE "999"
   @ 9,15 SAY "APRIL"
   @ 9,21 GET QAPR PICTURE "999"
   @ 10,15 SAY "MAY"
   @ 10,19 GET QMAY PICTURE "999"
   @ 11,15 SAY "JUNE"
   @ 11,20 GET QJUN PICTURE "999"
   @ 12,15 SAY "JULY"
   @ 12,20 GET QJUL PICTURE "999"
   @ 13,15 SAY "AUGUST"
```

```
  @ 13,22 GET QAUG PICTURE "999"
  @ 14,15 SAY "SEPTEMBER"
  @ 14,25 GET QSEP PICTURE "999"
  @ 15,15 SAY "OCTOBER"
  @ 15,23 GET QOCT PICTURE "999"
  @ 16,15 SAY "NOVEMBER"
  @ 16,24 GET QNOV PICTURE "999"
  @ 17,15 SAY "DECEMBER"
  @ 17,24 GET QDEC PICTURE "999"
  READ
  RELEASE ALL EXCEPT Q???
  SAVE TO A:ARNGQTAS
  RELEASE ALL
  RESTORE FROM A:BRNGQTAS
  RESTORE FROM UNITMEM ADDITIVE
  ERASE
  @ 3,15 SAY "ENTER RANGE QUOTAS AS PROJECTED,;
FOR THE YEAR,"
  @ 4,15 SAY "FOR UNIT: "
  @ 4,25 SAY TWOCO
  @ 6,15 SAY "JANUARY"
  @ 6,23 GET QJAN PICTURE "999"
  @ 7,15 SAY "FEBRUARY"
  @ 7,24 GET QFEB PICTURE "999"
  @ 8,15 SAY "MARCH"
  @ 8,21 GET QMAR PICTURE "999"
  @ 9,15 SAY "APRIL"
  @ 9,21 GET QAPR PICTURE "999"
  @ 10,15 SAY "MAY"
  @ 10,19 GET QMAY PICTURE "999"
  @ 11,15 SAY "JUNE"
  @ 11,20 GET QJUN PICTURE "999"
  @ 12,15 SAY "JULY"
  @ 12,20 GET QJUL PICTURE "999"
  @ 13,15 SAY "AUGUST"
  @ 13,22 GET QAUG PICTURE "999"
  @ 14,15 SAY "SEPTEMBER"
  @ 14,25 GET QSEP PICTURE "999"
  @ 15,15 SAY "OCTOBER"
  @ 15,23 GET QOCT PICTURE "999"
  @ 16,15 SAY "NOVEMBER"
  @ 16,24 GET QNOV PICTURE "999"
  @ 17,15 SAY "DECEMBER"
  @ 17,24 GET QDEC PICTURE "999"
  READ
  RELEASE ALL EXCEPT Q???
  SAVE TO A:BRNGQTAS
  RELEASE ALL
  ERASE
  RESTORE FROM A:CRNGQTAS
  RESTORE FROM UNITMEM ADDITIVE
  @ 3,15 SAY "ENTER RANGE QUOTAS AS PROJECTED,;
FOR THE YEAR,"
  @ 4,15 SAY "FOR UNIT: "
  @ 4,25 SAY THREECO
  @ 6,15 SAY "JANUARY"
  @ 6,23 GET QJAN PICTURE "999"
  @ 7,15 SAY "FEBRUARY"
  @ 7,24 GET QFEB PICTURE "999"
  @ 8,15 SAY "MARCH"
  @ 8,21 GET QMAR PICTURE "999"
  @ 9,15 SAY "APRIL"
  @ 9,21 GET QAPR PICTURE "999"
  @ 10,15 SAY "MAY"
  @ 10,19 GET QMAY PICTURE "999"
  @ 11,15 SAY "JUNE"
  @ 11,20 GET QJUN PICTURE "999"
  @ 12,15 SAY "JULY"
  @ 12,20 GET QJUL PICTURE "999"
```

```
   @ 13,15 SAY "AUGUST"
   @ 13,22 GET QAUG PICTURE "999"
   @ 14,15 SAY "SEPTEMBER"
   @ 14,25 GET QSEP PICTURE "999"
   @ 15,15 SAY "OCTOBER"
   @ 15,23 GET QOCT PICTURE "999"
   @ 16,15 SAY "NOVEMBER"
   @ 16,24 GET QNOV PICTURE "999"
   @ 17,15 SAY "DECEMBER"
   @ 17,24 GET QDEC PICTURE "999"
   READ
   RELEASE ALL EXCEPT Q???
   SAVE TO A:CRNGQTAS
   RELEASE ALL
   ERASE
   RESTORE FROM A:DRNGQTAS
   RESTORE FROM UNITMEM ADDITIVE
   @ 3,15 SAY "ENTER RANGE QUOTAS AS PROJECTED,;
 FOR THE YEAR,"
   @ 4,15 SAY "FOR UNIT: "
   @ 4,25 SAY FOURCO
   @ 6,15 SAY "JANUARY"
   @ 6,23 GET QJAN PICTURE "999"
   @ 7,15 SAY "FEBRUARY"
   @ 7,24 GET QFEB PICTURE "999"
   @ 8,15 SAY "MARCH"
   @ 8,21 GET QMAR PICTURE "999"
   @ 9,15 SAY "APRIL"
   @ 9,21 GET QAPR PICTURE "999"
   @ 10,15 SAY "MAY"
   @ 10,19 GET QMAY PICTURE "999"
   @ 11,15 SAY "JUNE"
   @ 11,20 GET QJUN PICTURE "999"
   @ 12,15 SAY "JULY"
   @ 12,20 GET QJUL PICTURE "999"
   @ 13,15 SAY "AUGUST"
   @ 13,22 GET QAUG PICTURE "999"
   @ 14,15 SAY "SEPTEMBER"
   @ 14,25 GET QSEP PICTURE "999"
   @ 15,15 SAY "OCTOBER"
   @ 15,23 GET QOCT PICTURE "999"
   @ 16,15 SAY "NOVEMBER"
   @ 16,24 GET QNOV PICTURE "999"
   @ 17,15 SAY "DECEMBER"
   @ 17,24 GET QDEC PICTURE "999"
   READ
   RELEASE ALL EXCEPT Q???
   SAVE TO A:BRNGQTAS
   RELEASE ALL
ENDIF
RESTORE FROM TEMP
STORE F TO DONE
DO WHILE .NOT. DONE
   ERASE
   @ 12,24 SAY "DO YOU WANT TO RESET YEARLY TRAINING;
 VALUES"
   @ 13,24 SAY "IN THE DATA BASE FOR THE BATTALION?"
   ACCEPT "                    ENTER (Y OR N) ====>" TO RESET
   IF !(RESET) = 'Y'
      STORE T TO DONE
      USE B:BST
      REPLACE ALL COC WITH "***"
      REPLACE ALL HIS WITH "***"
      REPLACE ALL COD WITH "***"
      REPLACE ALL INT WITH "***"
      REPLACE ALL AID WITH "***********"
      REPLACE ALL UNI WITH "***"
      REPLACE ALL PFT1RAW WITH 000
      REPLACE ALL PFT1DATE WITH "DDMMYY"
```

```
         REPLACE ALL PFT1CLSS WITH "*"
         REPLACE ALL PFT2RAW WITH 000
         REPLACE ALL PFT2DATE WITH "DDMMYY"
         REPLACE ALL PFT2CLSS WITH "*"
         REPLACE ALL NBC WITH "******"
         REPLACE ALL MKS WITH "******"
         REPLACE ALL TAC WITH "*****"
         USE B:QUAL
         REPLACE ALL RFLSCORE WITH "***"
         REPLACE ALL RFLQUAL WITH "**"
         REPLACE ALL RFLDATE WITH "DDMMYY"
         REPLACE ALL PSTSCORE WITH "***"
         REPLACE ALL PSTQUAL WITH "**"
         REPLACE ALL PSTDATE WITH "DDMMYY"
         USE
      ELSE
         IF !(RESET) = 'N'
            STORE T TO DONE
         ENDIF
      ENDIF
   ENDDO
   RELEASE ALL EXCEPT AA???????
   RETURN
```

B. SYSTEM ACCESS CONTROL ROUTINE

```
* Routine Name: Rstaccss.prg
* Module Name: Maintenance Module
* Version: 6.5.3
* Author: D.P. Haeusler
* Date: 8 Feb 84
* Variables Used: thru, ac*, more, lines, done, cont
* Variables Modified: same as above
* Variables Created: same as above
* Variables Released:  all
* Files (opened/closed): a:security(o/c)
* Temporary Files Created: none
* Using Subroutines: System.prg
* Description: This routine allows users with an access
* level of 1 to update the access list.

STORE F TO THRU
DO WHILE .NOT. THRU
   ERASE
   @ 8,28 SAY " SECURITY ACCESS LIST"
   @ 9,28 SAY " CHOOSE OPTION TO BE EXECUTED"
   @ 11,24 SAY " L...LIST ALL USERS"
   @ 12,24 SAY " A...ADD TO ACCESS LIST"
   @ 13,24 SAY " D...DELETE FROM ACCESS LIST"
   @ 14,24 SAY " Q...QUIT TO SYSTEM FUNCTION MENU"
   ACCEPT "       ENTER OPTION ===>" TO ACCOPT
   DO CASE
      CASE !(ACCOPT) = "L"
         USE A:SECURITY INDEX A:ACCNAME
         DO WHILE .NOT. EOF
            ERASE
            @ 3,24 SAY " SECURITY ACCESS LIST"
            @ 5,1 SAY "NAME               USER NO.;
            PASSWORD     LEVEL "
            STORE 7 TO LINES
            DO WHILE .NOT. EOF .AND. LINES < 22
               @ LINES,1 SAY NAME
               @ LINES,20 SAY USERID
               @ LINES,41 SAY USERPASS
               @ LINES,56 SAY AUTHLEV
               SKIP
               STORE (LINES + 2 ) TO LINES
               IF LINES > 22
                  @ 23,15 SAY "*** PRESS ANY KEY TO;
 CONTINUE ***"
                  SET CONSOLE OFF
                  WAIT
                  SET CONSOLE ON
               ENDIF
            ENDDO
         ENDDO
         @ 23,15 SAY "*** PRESS ANY KEY TO CONTINUE ***"
         SET CONSOLE OFF
         WAIT
         SET CONSOLE ON
         USE
      CASE !(ACCOPT) = "A"
         STORE T TO MORE
         DO WHILE MORE
            ERASE
            STORE "               " TO ACNAME
            STORE "     " TO ACCUSER
            STORE "         " TO ACCPASS
            STORE 0 TO ACCLEV
            @ 10,25 SAY "NAME OF USER"
            @ 10,38 GET ACNAME PICTURE "XXXXXXXXXXXXXXX"
            @ 12,25 SAY "USER ID"
```

```
           @ 12,33 GET ACCUSER PICTURE "XXXXX"
           @ 14,25 SAY "PASSWORD"
           @ 14,34 GET ACCPASS PICTURE "XXXXXXXX"
           @ 16,25 SAY "AUTHORIZATION LEVEL"
           @ 16,45 GET ACCLEV PICTURE "9"
           READ
           STORE T TO NOGOOD
           DO WHILE NOGOOD
              IF (ACCLEV < 1) .OR. (ACCLEV > 3)
                 @ 23,1 SAY " ILLEGAL AUTHORIZATION LEVEL;
---REENTER"
                 @ 16,45 GET ACCLEV PICTURE "9"
                 READ
              ELSE
                 STORE F TO NOGOOD
              ENDIF
           ENDDO
           USE A:SECURITY INDEX A:ACCNAME, A:SECINDX
           APPEND BLANK
           REPLACE NAME WITH !(ACNAME),;
           AUTHLEV WITH ACCLEV
           REPLACE USERID WITH !(ACCUSER),;
           USERPASS WITH !(ACCPASS)
           USE
           STORE F TO DONE
           DO WHILE .NOT. DONE
              ERASE
              @ 10,25 SAY " DO YOU WANT TO ENTER ANOTHER;
USER?"
              ACCEPT "        ENTER (Y OR N ) ===>";
              TO CONT
              IF !(CONT) = "Y"
                 STORE T TO DONE
              ELSE
                 IF !(CONT) = "N"
                    STORE T TO DONE
                    STORE F TO MORE
                 ENDIF
              ENDIF
           ENDDO
        ENDDO
     CASE !(ACCOPT) = "D"
        STORE T TO MORE
        DO WHILE MORE
           ERASE
           @ 12,24 SAY " ENTER NAME OF THE USER TO BE;
DELETED"
           @ 13,24 SAY " OR QUIT TO REENTER ACCESS MENU "
           ACCEPT "       NAME ====>" TO  ACNAME
           STORE !(ACNAME) TO ACNAME
           IF ACNAME = "QUIT"
              STORE F TO MORE
           ELSE
              USE A:SECURITY INDEX A:ACCNAME, A:SECINDX
              FIND &ACNAME
              IF # = 0
                 @ 22,28 SAY "INDIVIDUAL NOT FOUND IN;
FILE"
                 @ 23,24 SAY "*** PRESS ANY KEY TO;
CONTINUE ***"
                 SET CONSOLE OFF
                 WAIT
                 SET CONSOLE ON
              ELSE
                 DELETE
              ENDIF
              USE
           ENDIF
           USE A:SECURITY INDEX A:ACCNAME, A:SECINDX
```

```
            PACK
            USE
         ENDDO
      CASE  !(ACCOPT) = "Q"
         STORE  T TO THRU
   ENDCASE
ENDDO
RELEASE ALL EXCEPT AA??????
RETURN
```

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